

from trail dust
to star dust

M. Margaret Green

from trail dust to star dust

BY

M. Margaret Green

Publisher of a Pictorial Map entitled
"Map of Johnstown 1800-1950"

*The Story of Johnstown, Pennsylvania,
a City Resulting from Its Environment*

Johnstown's story has been the story of its environment,
of the Indians and their trails, of the natural
resources hidden in the hills, but most
of all the story of men.

MCMLX

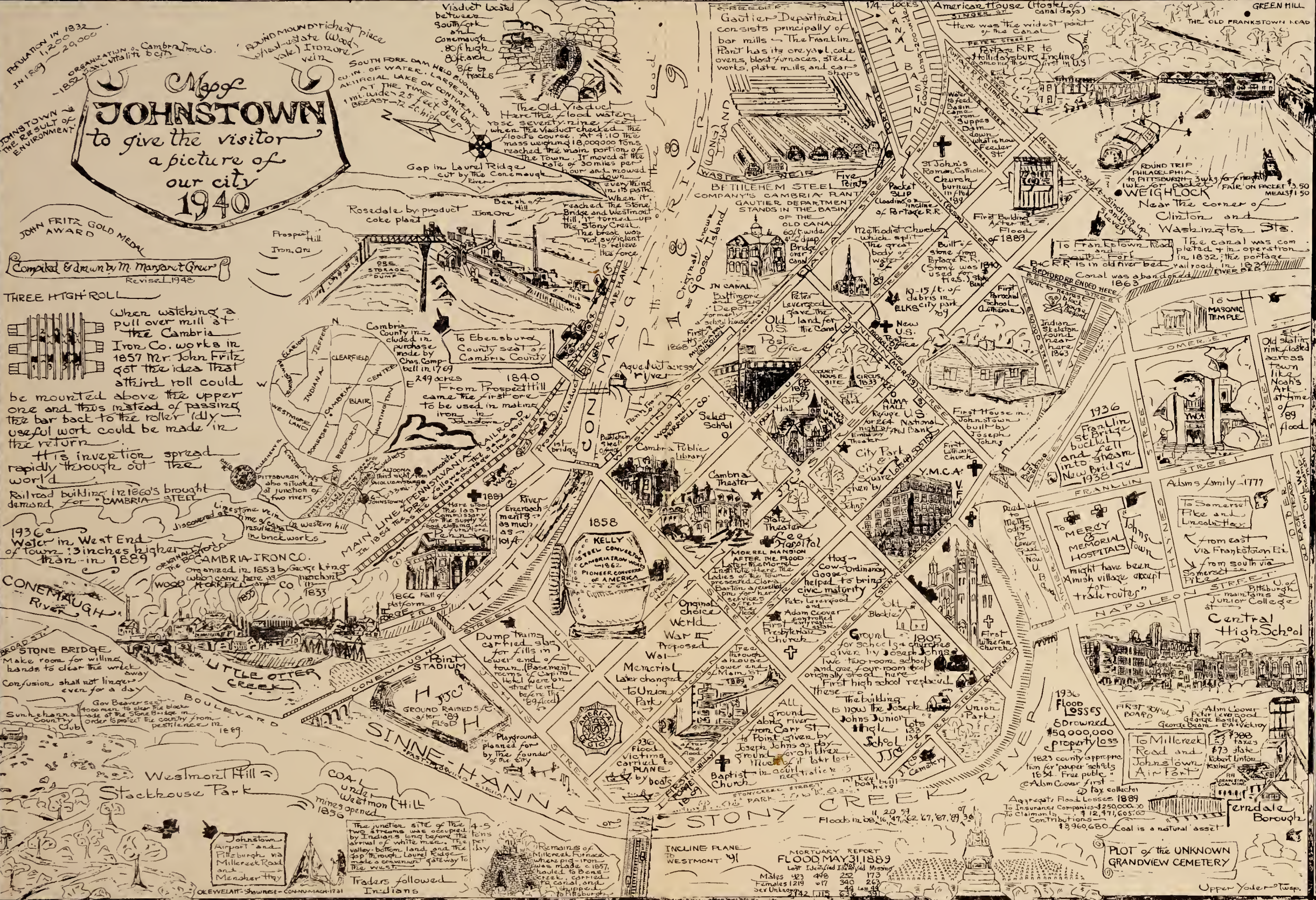
RADIATORS

GREENHOUSE PRODUCTS

The native forest consisted of oak, maple, hickory, walnut, birch, chestnut, and pine. Early lumbering operations and a steady demand for mine props have left little of the original timber, though it has been followed by a second growth mixed hardwood forest on the slopes not exposed to blast furnace fumes. Bedded iron ore was under the plateau surface. Coal is in the valley sides and clay is adjacent to the coal layers. Limestone in western hills.

JOHN FRITZ GOLD MEDAL
Compiled & drawn by M. Margaret Grew
Revised 1948
THREE HIGH ROLL
When watching a pull over mill at the Cambria Iron Co. works in 1857 Mr. John Fritz got the idea that a third roll could be mounted above the upper one and thus instead of passing the bar back to the roller idly useful work could be made in the return.
His invention spread rapidly through out the world.
Railroad building in 1860's brought demand for CAMBRIA-STEEL.
1936 Water in West End of town 13 inches higher than in 1889.
CONEMAUGH RIVER
STONE BRIDGE
Make room for willow, hands to clear the wreck away. Confusion shall not linger even for a day.
Gov. Beaver sent 400 men to clear the block of the Stone Bridge in order to protect the country from pestilence in 1889.
SUNSHINE CLUB
Johnstown Airport - and Pittsburgh via Millersburg Road and Menasha Hwy.
OKEWELAT: Shawnee - CONNEMAR 1721

GREEN HILL
THE OLD FRANKTOWN ROAD
ROUND TRIP PHILADELPHIA TO PITTSBURGH 3 days for freight 1 week for passenger. FARE ON PACKET \$1.50 MEALS \$1.50
WEIGHLOCK
Near the corner of Clinton and Washington Sts.
The canal was completed in operation in 1832; the portage in 1834; the canal was abandoned in 1863.
1936 Franklin St. bridge and fall and stream into bridge New Bridge 1938
Adams family - 1777
To Somerset Pike and Lincoln Hwy.
From east via Frankstown Rd.
From south via Somerset Pike
Pittsburgh Junior College
Central High School
1936 Flood losses \$50,000,000 property loss 1823 county appropriation for pauper schools 1834 Free public school
Alm Coover first tax collector
Aggregate Flood Losses 1889 To Insurance Companies \$250,000.00 To Claimants \$12,471,605.00 Contribution \$3,960,680.
Coal is a natural asset
PLOT OF THE UNKNOWN GRANDVIEW CEMETERY
Upper Yoder Twp.



The city has an elevation of only 1184 feet above sea level, but the surrounding uplands of a thousand feet cause it to be both rainier and colder than the normal. It is 47.51 inches of precipitation is eleven inches more than Pittsburgh's and its growing season of 163 days is eight days shorter than that of Philadelphia. Snowfall averages 52 inches vs 33 for Pittsburgh and 23 for Philadelphia.

IRON STEEL

COAL

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MCMLX

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* This is a reproduction of an original done by the Author in 1940. It was revised in 1950 on the occasion of Johnstown's sesquicentennial. The revised edition is a 30 x 23 inch pictorial map printed in six colors.

Introductory Note

This posthumous work was written by M. Margaret Greer, a native of Johnstown, Pennsylvania. She was a descendent of two of Johnstown's oldest families, being a daughter of Samuel S. Greer (son of David Francis Asbury Greer, a merchant of great integrity) and Emma Masters Greer (daughter of Joseph Masters, an associate judge).

Educated during her early years in the Johnstown Public Schools, Miss Greer later was graduated from Wells College, Aurora, New York, in 1918. She also did graduate work at Columbia University and at the University of Pittsburgh, from which she received the Master of Arts degree. She joined the faculty of the Westmont Hilltop High School at its inception, was librarian and dramatic coach for many years, taught mathematics and German, and later became Guidance Counselor. She showed great wisdom and learning in her teaching and was possessed with an overwhelming zeal to impart culture and to instill a desire for higher education in her students. Her greatest outside interest centered in preserving the history of Johnstown, which interest was inspired by talks with her father. This led to painstaking research and publication of a pictorial map in 1950. Later she continued her research in preparation of this history.

Because of her untimely death, she was unable to revise this work and to include material about Jewish settlers in the area. However, her enthusiasm inspired Dr. Meyer Bloom, Vice President of Johnstown Jewish Community Council, to interest a committee to undertake research and publication of a history of the Jewish people of Johnstown, in a separate volume.

Miss Greer's object in writing this work seems to have been to present clearly and accurately those facts about the founders and builders of Johnstown which would be of interest and value to present and future generations. It is believed by her family and friends that it was her intention to bring up to date her story of Johnstown's progress by including such recent additions to civic growth as the Johnstown Cambria County Airport, the Pennsylvania Rehabilitation Center, the Research Center of the National-United States Radiator Corporation (now Crane Company), The Allegheny Lutheran Home for the Aged, and other new developments in the area. The phrase "A City Resulting from Its Environment" seems to be a most appropriate keynote. Through study of this worthwhile history the reading public may grasp a feeling of the tribulations and triumphs inherent in Johnstown's one hundred and sixty years of progress.

MARGARET EVANS
ALICE M. GOCHER

Acknowledgments

Grateful acknowledgment is made by the publisher and his family to Miss Alice Gocher and Miss Margaret Evans, lifelong friends of the Author, for their kind Introductory Note.

It is a privilege to extend gratitude to Dr. Wernher von Braun and *This Week Magazine* for their permission to use Dr. von Braun's commentary at the end of Chapter 26; to Bethlehem Steel Co., Penn Traffic Co., Pennsylvania Railroad, and *Tribune-Democrat* for photographs supplied to the publisher; and to Miss Ruth Sutch and the Cambria Public Library for the use of their files and permission to reproduce the *Messiah* and the Millcreek Furnace.

The generous assistance of those persons and organizations, not known to the publisher, who cooperated with the Author in furnishing the mass of facts condensed in this small volume, cannot be spoken of too highly.

W.M.G.

1

The Beginning of a Pioneer Settlement

Go back in imagination a century and a half—that was the beginning of Johnstown. Go back a century before that—the valley then belonged to the Indians. Go back to antediluvian days and try to imagine what this section of Pennsylvania looked like.

In their upper reaches, the valleys of the Conemaugh River and the Stony Creek which meet in Johnstown, are sharply V-shaped, but in the immediate vicinity of the City the valley bottoms are flat. Apparently the Conemaugh in cutting through the Laurel Ridge of the Alleghenies on its northwestward course was delayed in its downward progress and developed small local flood plains. The swift-moving waters cut their way through the mountain ridges, for Pennsylvania rivers cross through rather than parallel the mountain ridges. The freed water of the local rivers left a bottom land surrounded by plateaus and edged by the two streams converging at *The Point*. These bottom lands, commanding a gap through the mountains to the west, formed a good site for early settlement. The gap later proved to be a gateway to the West; first for the canal and then for the Pennsylvania Railroad. These modes of transporta-

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tion linked Philadelphia and Pittsburgh and so gave passage to the growing West. For this reason the vast immigration to the West passed through Johnstown.

When the Indians roamed the Valley, it was a wilderness. The hills were luxuriant in their rich and varied growth. The iron ore and coal hidden in the hills were still the secret of nature. For modern dwellers in the narrow valley and on the broad plateau hilltops, only the imagination can picture the luxurious growth of hickory, chestnut, walnut, giant spruce and sturdy oak, and the lush lands on the bottom. Only in imagination can they picture the forest alive with game and the clean, clear, cool streams filled with "finny beauties." Only in imagination can they see the deer, the fox, the bear, and the wolf living in the wooded hillsides. Could the Indian imagine or wish for a happier hunting ground?

Geographically, Johnstown has an elevation of only 1,184 feet above sea level, but the surrounding uplands of 1,000 feet cause it to be both rainier and colder than the normal. Its 47.51 inches of precipitation is eleven inches more than Pittsburgh's and its growing season of 163 days is 18 days shorter than that of Pittsburgh and 42 days shorter than that of Philadelphia. Snowfall averages 52 inches annually, against 33 for Pittsburgh and only 23 inches for Philadelphia.

2

The First Settlers

Geography has had its effects on many countries and places. The richness of the soil in the Nile valley in Egypt and the Tigris-Euphrates valley in Mesopotamia made these sections the cradle of civilization. Greece, cut by many small valleys, developed separate city-states jealous of each other. Italy's position on the Mediterranean Sea and Rome's position on the western coast instead of the eastern coast of Italy made it possible for the Romans to dominate the sea and the world of the pre-Christian era. Just so, the geographical situation of the Conemaugh River and Stony Creek invited settlement in the Valley.

While laborers were digging the race for a forge on the Conemaugh, old firebrands, pieces of blankets, earthen smoke pipes and other Indian relics were discovered at a depth of twelve feet below the surface of the earth. The Indians had departed when the first settlers came but the relics prove their presence here. The Indians must have left around 1760, for they were the followers of the French and had probably moved on when Fort Duquesne was taken in 1758 by the British. It is certain, then, that there was an Indian village at the confluence

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of the two rivers which today are called the Little Conemaugh and the Stony Creek, but which were known to the Indians as the Connumoch (little otter) and the Sinne-hanne (fast-flowing stream). Even though the Stony Creek is in size larger than the Little Conemaugh River, it is called a creek because the Indians named it Sinne-hanne, not Sinne-sipu. *Hanne* is the Indian name for stream, especially a swift mountain stream; *sipu* is the Indian word for river.

In the earliest records the village at the junction of these rivers was known as Gunammochk, Connumoch (little otter), Caugh-naugh-maugh, Quin-nim-maugh-koong. The Joseph Johns Charter spells it Con-nu-mach, November 3, 1800. The earlier Indian spellings were used about 1731. Best authorities say the redmen called the place Conemaugh-Old Town, which was the name used for the settlement. In 1731 Jonah Davenport and James Le Tort, Indian traders, were in the territory of what is now Cambria County. In their report they spell it "Connumah." Le Tort reports that there were twenty families and sixty men in the village. It was situated on the trail which led from Frankstown, two miles east of Hollidaysburg on the Frankstown Branch of the Juniata River, to Kittanning (Great Stream) on the Allegheny and was the largest Indian village west of Shamokin. Certainly it was an ideal location for an Indian village, for the hills and valleys yielded a rich harvest of nuts and game, and the rivers gave fish and afforded transportation for these first products. In 1731 Okewelah was the Shawanese chief. The Shawanese, or Shawnees, and the Delawares who dwelt here were restless, savage, fierce,

The First Settlers

treacherous, and deceptive, but not cowards. In 1748 Conrad Weiser, an Indian interpreter and backwoods diplomat, went through this territory bringing gifts to the savage Shawanese. It is also recorded that about 1778 marauding Indians around Hart's Sleeping Place (near Carrolltown) along the Kittanning trail were aiding British troops. They took Moses Hecks and Mr. Gersham as prisoners to Detroit. The last Indian attack in the area took place in 1784.

It was in May 1774 that John Wipey, an inoffensive Indian—the last of the Delawares—and a friend of the Adamses, the first white settlers in the Conemaugh valley, was shot to death while fishing from a canoe in the Conemaugh. When the Delawares left Frankstown, Wipey remained and built a cabin in East Wheatfield Township, Indiana County, on the land of the Matthews family. He made his living by fishing, hunting, and trading. The shooting occurred just a short distance below the section of Johnstown called Coopersdale. Two white men named John Hinckston and James Cooper killed Wipey. His wanton death caused much consternation among the provincial people. Gen. Arthur St. Clair, who was stationed at Fort Ligonier, the nearest fort to Conemaugh-Old Town, informed the governor of the State. The council offered 500 pounds for the arrest of the killers, but they were never apprehended.

In the colonial era, the Indians frequently had been cruelly cheated and their resentment smoldered. Much that white men did to the Indians was contrary to the ideals of William Penn, their friend. The sale of rum ("lum" as the Indians called it, for they could not pro-

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nounce “r”) and the white man’s illegal encroachment upon their lands in places other than Pennsylvania were just grievances. The Delawares were most offended by the encroachment and deception in connection with the *Walking Purchase, but being helpless and under the power of the Iroquois, they were ejected by the Iroquois and went farther into the interior. Here they came under French influence and in the French and Indian War (1754-1763) they had an opportunity to give way to their hatred and disgust.

Even though the Treaty of 1754 for the land west of the Susquehanna River had been signed by the Six Nations, the Indians had continued to complain and maraud. On their return home after signing the treaty, they realized that they had sold their lands and tried then to make an alliance with the French, who promised to redeem the lands from the English. The territory west of the Allegheny Mountains was defenseless. Under French instigation, it was made desolate by the Indians. Not until General Forbes in 1758 captured Fort Duquesne and named it Fort Pitt did the Indians begin to leave.

In 1768 a general conference of the Six Nations was called to meet at Fort Stanwix, New York, and another treaty was made. By the Treaty of Fort Stanwix and for the sum of \$10,000 the Indians sold all their

*In 1682 William Penn purchased from the Delawares a tract of land, bounded on the east by the Delaware River and in the interior at a point as far as a man could walk in three days. Penn and a party of Indians started on the walk; at the end of a day and a half, Penn concluded that it was as much land as he wanted, and a deed was given to the lands at that point—about 40 miles from the starting point. In 1737 after Penn’s death the tract was increased by a party of expert walkers to a point 70 miles in the interior.

The First Settlers

interest in the lands drained by the Susquehanna, the west branch of which rises near "Canoe Place" beyond which there was "*insufficient water to float a canoe.*" "Canoe Place" is now Cherry Tree in Cambria County.

The savage Indians gradually but finally yielded to the aggressive white man. The tomahawk gave way to the ax of the sturdy farmer; the deer and the fox made way for the sheep, the cow, the goose, and the horse; the wigwam was replaced by the rough-hewn log cabin. Fields of golden grain and the plough succeeded the trackless forests and the implements of the chase.

When the Indian corn patch was supplanted by the cultivated farm, other changes followed. The flat boat supplanted the canoe; the log cabin took the place of the wigwam; the canal boat and packet displaced the flat boat; the stagecoach, locomotive, passenger and freight car took the place of the pack saddle and rude wagon. Today the airplane vies with the railroad and trucking industry for supremacy in transportation. Johnstown has witnessed all forms—"from trail dust to star dust." The noise of the forge and the heat of the furnace quieted the hoot of the owl and the howl of the wild animal. There is nothing so permanent as change!

3

Securing The Land

How was the land known as Pennsylvania secured? Among the Royal Charters of Charles II was the one granted to William Penn in 1681 for the lands of Pennsylvania. Penn more safely secured the land by treaties with the Indians, for many of these charters were conflicting. At one time by a similar charter Connecticut claimed almost one-third of Pennsylvania. When Colonel Thomas Dongan, Lord of Limerick, heard of Penn's negotiations with the Indians for the Susquehanna River, he became panic-stricken, for he feared the Indians, instead of bringing their furs to the Hudson River, would send them to what is now Philadelphia by way of the Susquehanna River. Dongan had conveyed his rights to Penn for 100 pounds. The following is from the colonial records of the deed or lease of Colonel Dongan to William Penn January 12, 1696:

"To have and to hold, from the date hereof, for and unto the end and term of 1,000 years paying . . . annually and every year on the Feast Day of Saint Michael the Archangel, the rent of a pepper corn if the same be lawfully demanded . . . To the said William Penn . . . all that tract of land lying upon both sides the River commonly called Susquehanna River and the lakes adjacent, in or near the Province of Pennsylvania . . ."

Securing The Land

Because the west branch of the Susquehanna has its origin near Cherry Tree, the Fort Stanwix Treaty, 1768, included parts of Cambria, Clearfield, and Indiana counties. Immediately after the Fort Stanwix Treaty, the Commonwealth opened the land in that purchase to settlers and fixed April 3, 1769, as the date when applications could be filed.

On that day Charles Campbell took out a warrant for land lying between the two rivers, for which he paid little more than 43 pounds. He sold it to Wilkins for a little more. Wilkins conveyed it to Johnston, who in turn and for a little more sold the warrant to James McLanahan for 50 pounds colonial currency. The latter sold the tract to Joseph Johns in 1793.

The Early White Settlers

Jonah Davenport and James Le Tort, Indian traders, were the first travelers in the Connumoch valley. This was in 1731. Conrad Weiser, Indian interpreter and agent in dealing with the Indians, particularly the Iroquois, came through the valley in 1748, when he was securing the support of the Iroquois and Delawares for the English against the French. The reports of these men show that Johnstown's history is connected with the Indians. On the Connumach Creek, there were three Shawanese towns with a total of 115 families and 360 men. Okewelah, their chief, favored the French.

The Adams family, Solomon and Samuel and their sister Rachel, are credited as being the first *white* settlers to "till the soil" on land within the confines of Cambria County. They came about 1770 from Berks County and settled in the section known as Horner's Town or the present Seventh Ward. Streams and hills perpetuate their names. Captain Michael McGuire and his family settled in the north of the County, along the branch near Kaylor's Station, in 1787. Michael Rager also came to the County and reared 27 vigorous sons and daughters. These were perhaps the first *permanent* settlers. Prince Gallitzin, who became the beloved Father Gallitzin,

The Early White Settlers

built at Loretto the first church to be erected between the Mississippi and the Susquehanna rivers. In a little log church dedicated on Christmas Eve, 1799, the first mass atop the Alleghenies was celebrated.

The Adamses made their living mostly by trading maple syrup, venison, and fish. These they would take by canoe, or by pack horse, or on foot over the trail to the east. If by trail, it would be the Bedford trail to Fort Bedford, the nearest protection from the Indians and their raids. The Bedford Road is, therefore, the oldest road in the County. Its name is perpetuated in the name of Bedford Street which was the terminus of the road. It is recorded that the Adams family walked to Bedford for protection when Indian raids were in progress. It is said that the family, having heard from a friendly Indian of a coming Indian raid, had gone to Fort Bedford; the brothers when returning for their cattle were ambushed on the trail. Solomon escaped, but Samuel and the Indian fought until they killed each other. After Solomon had given the alarm, he returned with several men, found the bodies, and buried them. This incident supposedly happened at the place now called Scalp Level. Their graves have been marked by the *Cambria County Historical Society*. Tradition also says that Rachel Adams was killed by Indians. Just as the Bedford trail led to the east and Fort Bedford, so the trail to the west led to Fort Ligonier and Fort Duquesne. These forts were havens of refuge, offering safety to the pioneers. The Shawanese and Delawares—both restless and quarrelsome and encroached upon by white men—raided and plundered and killed.

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In 1769 Joseph Schantz came from Switzerland to Berks County, Pennsylvania. From Berks County he went to Somerset County. Thirty years after his arrival in America he came from Davidsville to Conemaugh-Old Town. In 1793 he erected his log cabin of walnut logs near the head of Vine Street. In 1800 Schantz laid out the town of Conemaugh which included all the lots west of Franklin Street to *The Point*. He sold several lots for \$10 and \$20 and the remaining bulk was later disposed of. In his plan for the town, Joseph Schantz (later anglicized to *Joseph Johns*) guaranteed to the citizens five public plots: (1) a public square which to-day is called Central Park—on which Johns hoped the County courthouse would stand, (2) an oblong square at Market and Carr Streets for a school and a church, (3) the diamond at Main and Market Streets—in that day “the square” was considered necessary to every well-established town, (4) a parade ground for the militia and public sports, known today as *The Point*, (5) a Union Graveyard, now the site of the Cambria County War Memorial. Bodies buried in the Old Union Graveyard were reinterred in Grandview Cemetery.

Joseph Johns’ failure to secure the courthouse for his town severely disappointed him. This, plus his undying love for farming, was responsible for his selling out his entire claim—exclusive of the five public lots—to Hartley and Anderson of Bedford, who subsequently sold it to Holliday (founder of Hollidaysburg), who in turn sold to Peter Levergood. The Johns ground included all land from Franklin Street, formerly known as Morrison Avenue, to *The Point*. Three acres lying between Clinton

The Early White Settlers

Street and Franklin Street, from Cover Alley to Washington Street, belonged to Adam Cover. Levergood and Cover (Johnstown's first realtors) plotted these lots. What is now the Swank corner was then Mr. Levergood's garden patch.

The land lying between Bedford Street and Baumer Street out to the "Horner Line" was acquired by Thomas Sharp in exchange for a cow. In the early days, this section was known as Sharpsburg. Peter Goughnour and Jacob Stutzman who lived in "the flats" were other early settlers. Mr. Cover lived on the plateau east of the level ground, known today as Green Hill or Cover Hill. Peter Levergood and Adam Cover (sometimes he spelled his name Coover) owned the ground from Franklin Street to the Frankstown Hill. The General Assembly in 1831 incorporated these two areas into the Borough of Conemaugh which in 1834 became the Borough of Johnstown, named in honor of the founder, *Joseph Johns*.

It is traditional in the Cover family that when Mrs. Cover, in 1814, having ridden horseback from Harrisburg, then a thriving town, stood on Cover Hill and looked down upon the vast wilderness, she wept and wondered why her husband had brought her from "the city" to "the wilderness."

Knowing the present price of real estate in the heart of the City, a modern realtor would be interested in comparing it with the prices paid and the exchange used when the land was first sold. Adam Cover in 1814 bought 177 acres for 100 pounds 12 shillings and 6 pence "lawful" money of Pennsylvania, but in 1848 he stipulated to pay a purchase obligation in "lawful" money of the

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United States, which meant gold and silver. However, he accepted "Bedford" money in payment of a property purchase when he was pressed for cash to meet the obligations which he had incurred for his brother-in-law, Mr. George Brenizer. "Bedford" money was in bad repute at the time and was not accepted by banks. Cover's confidence, however, was justified, for the money recovered normal value. (See Chapter 13, Exchange.)

The deeds to these properties are interesting. Those extant have a clause in them reserving for the Commonwealth one-fifth of all the gold and silver ore mined. This was to be paid at the mouth of the mine. The most exciting metal for Americans to pursue is gold. Yet for an industrial civilization iron is more valuable than gold. No mention is made in the deeds of iron or coal! They were then undiscovered. In many of the early deeds purchasers and sellers made their "marks" in lieu of signatures. In many of these early transactions, Joseph Schantz (who always wrote his name in German script), Adam Cover (Coover), Peter Levergood, and Christian Horner were the only ones able to write. Of the wives who signed the deeds, only Mrs. Cover could write. Each made his or her "mark" as an X. The original deed issued to Adam Cover, written on vellum, is still in the Cover family. It is dated 1785. In it Rittenhouse conveys to Jacob Stutzman of Bedford a tract of land measured in part from a certain chestnut tree to a certain cucumber tree. The Cover descendants have early deeds bearing the signatures of Joseph Schantz and Peter Levergood. Several of the deeds bear drawings of plots showing Conemaugh-Old Town and the holdings of Adam Cover and Peter Lever-

The Early White Settlers

good in Conemaugh-New Town. The measurements written in a mixture of German sound and English spelling are interesting: a lot is marked as 10 "rots" (rods) long or 8 "rots" wide. Some of the later deeds instead of being hand written on vellum are partially printed on paper, the printing of them being done by early newspapers in the County.

The Conemaugh and Stony Creek flats at the confluence of the two rivers, being the gateway to the West, became a stopping place for travelers or a permanent home for less venturesome settlers. Some of the early pioneers left the coast intending to go west, but, finding the flats a likely place, stayed, leaving the westward adventure to the more hardy. Among those early settlers aside from those already mentioned were Ludwig Wissinger, Christian Good, David Singer, John Horner, Paul Benshoff, Moses Canon, Jacob Horner, Christian Horner. Descendents bearing these names still live in the City and County.

Although the Adamses are regarded as the first white settlers in the Valley, they did not live long enough to bear much influence on the developing town. Besides, they were here before the town was laid out and lived to the south of it. Mr. Stutzman, probably the first white man to occupy the bottom land, died in 1816. A son of Mr. Stutzman was killed by an ox-team which was scared by a rattlesnake. Peter Goughnour was here in 1798. The Indians had departed but the territory was a wilderness. He found monuments of stone on graves, flint arrows, elk horns, and other evidences of Indian occupation. Peter Goughnour's notes have preserved for modern dwellers of the Valley some interesting facts:

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“At the time, there were no roads through the wilderness and nothing but canoes for navigating. Beasts of burden were rare but wild beasts were numerous. Panthers, wolves, bears, and such howled at night around the cabins of settlers.

“The bottoms in vicinity of Conemaugh-Old Town were luxuriant in growth. The hills grand . . . with glorious forests, amid which the woodman’s ax had never rung. Peavines, wild sunflowers twined and waved among the giant oaks, spruce and hickories.

“Yet there were troubles. Growing among the tall grass was a noxious weed, resembling garlic in taste and appearance called ‘ramps’ by the settlers which when eaten by the cows was sure to sicken them and stop the milk supply.

“The grass did not make good hay and the cultivation of corn, oats, rye and such was limited. To keep cattle from starving, the settlers cut down trees so the cows could browse upon the buds and young branches. The women had to clear the land and do rough work.

“Large quantities of maple syrup were manufactured and ‘packed’ by horse to neighboring settlements. Venison was an article of import for which Bedford was the principal market.

“Pig iron was later shipped to Pittsburgh by flat-bottom boats in the spring of the year.”

Conemaugh town was gradually becoming a place of business rather than farm land. Other early land titles were the Woodvale Titles, the Minersville Titles, the Osborne-Suppes Titles, the Kern, Haynes and Dibert Titles, the Moxham Titles, the Von Lunen holdings, and the Johnson Purchase. By 1828, the population was 200.

The Early White Settlers

These titles later designated boroughs which in time consolidated into the city of Johnstown.

Before 1811, all mail was obtained in Stoystown. In 1811, Johnstown got its first post office, and mail was brought from Stoystown two or three times a week. At first the post office was in John Linton's cabin at Main and Franklin Streets. Later it was moved to S. Priestly's house where mail was kept in a bread basket on a table. Often in the absence of the postmaster, the people pawed through the basket for their own mail.

The First Industries

The variety and types of early industries in or near Johnstown interested people of various cultures; Welsh in mining, Germans, Swedish and English in iron manufacture, Irish in labor. Many pioneers or "path breakers" into the West passed through the Conemaugh valley and Johnstown on their way west. Some of the more venturesome continued; some finding the Valley full of opportunities settled here. The cultures and traditions of many remain today. Later other cultural groups came.

The richness of the seven old cultures which immigrants of colonial times brought to Pennsylvania from the old world is reflected in the lives of those who passed through the Conemaugh Valley or who remained here.

OLD CULTURES	NEW CULTURES
1. Hollandish	1. Italian
2. Swedish	2. Russian Jewish
3. British Quaker, English, Welsh, Irish	3. Armenian
4. Pa. Dutch (From Rhine Valley and Switzerland)	4. Lithuanian
5. Scotch Irish	5. Polish
6. New England Puritans	6. Russian
7. Virginians	7. Greek

The First Industries

The seven new cultures are in many ways as interesting as the old. They were moulded by the forces of our life into as good Americans as were the seven old cultures. But let us preserve what we can of the old while there are yet objects of those cultures to preserve.

"We hold to tradition, we never forget the past, we front the future from experience all our yesterdays have handed on to us."

Cornelius Weygant

What did the settlers do? Among the very early settlers there were no trades. They bartered maple syrup, venison, fish, and nuts for the commodities they needed. Among those who came after the town was laid out, agriculture, wagon-making, carpentry, and forging were the chief pursuits. Not finding farming and cattle-raising successful, the early settlers added to those trades already mentioned a tannery, a gristmill, a sawmill, a distillery, and lumber yards. Most of the early settlers were German or Swiss. Then the Scotch-Irish came. In the north of the County, the Welsh and the Irish settled. At the time of the opening of the Canal, 1832, Cambria County, named by the Welsh for their own beloved hill-country, had 7000 inhabitants. All these people carried on the trades which were peculiar to either their own national groups or their present environment.

The great iron and steel industry in Johnstown was begun with the building of the first forge in Cambria County in 1809 at the head of Vine Street, according to Mr. James Swank in *"Iron in All Ages."* The forge was probably built by John Holliday, who had been connected with the iron industry in the Juniata valley. The first iron

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forged here was Juniata pig-iron brought in by pack horse over the Indian trails. Ore had not yet been discovered in the Johnstown hills. The "trains" which brought in this iron over the trails were certainly slow, tedious, and insignificant when compared with modern trucks. Five or six horses with a rider on the lead horse, and on each horse an inverted V frame, on which the bars of pig-iron rested, made up a train.

After the flood of 1811, the forge was moved to the Conemaugh River where the present entrance to Bethlehem Steel Company now is—just below the Pennsylvania Railroad station. At that time, dams were used for power to move what machinery there was. Evidently the breaking of the dam on the Stony Creek at the time of that flood caused the removal of the forge to the Conemaugh River. There the forge became the beginning of the great plant which is the industrial heart of Johnstown today.

At long last for the convenience of those who raised their own grain, a grist mill was erected in 1812 by John Storm. Buckwalter's grist mill was on Goose Island side of a race from the Conemaugh just below Franklin Street. This was a great satisfaction for the settlers. Before this time, they had to pack or haul all their grain many miles (by pack horse before wagon roads were available). Much of it was taken for grinding to Stoystown or to Bedford. Father Gallitzin, prince and priest, who looked after the temporal as well as spiritual welfare of his people, established a mill in his parish of Loretto. This was the first grist mill in Cambria County.

In 1816 the first keel boat was built by Isaac Proctor on the Stony Creek to convey freight and passengers to Pittsburgh when the water was sufficiently deep.

The First Industries

The spectacle of iron in Pennsylvania begins with the blacksmith shop of Thomas Rutter near Germantown. It was doubtless with ore from the pits in the White Marsh Valley that he fashioned his latches and cranes, his horse-shoes and ploughshares. In 1714 William Penn gave Rutter patent for 300 acres on the Mantawny, eight miles above Pottstown. Three years later Rutter opened the Colebrookdale Mine and erected a charcoal furnace to smelt ores. Not content with his little business near tide-water, he wanted what seemed to him the inexhaustible supplies of water power, cordwood and ore that the backwoods alone could produce. Such a spirit as his animated the progress of iron making in Pennsylvania and resulted in making the "hinterlands" of Pittsburgh as famous as those about Birmingham in old England.

In fact, iron making in Pennsylvania began under the management of Englishmen. Rutter was English and so were the Pottses—the ironmasters most widely associated with furnaces and forges in the Schuylkill Valley. Several early ironmasters were German. John Fritz, a German, will long be remembered for his inventions that helped Johnstown to prominence. Under his brilliant leadership. Johnstown became "the world's most important producer of iron and steel." School geographies of the time pictured it as such.

Everywhere the traveler goes in Pennsylvania he comes upon pits or mines from which iron ore has been dug and furnaces in which iron was extracted from the ore. Unfortunately the furnaces near Johnstown have disappeared. Their names and their ironmasters' names survive in place names. Perhaps the most famous Penn-

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sylvania furnace was the one at Valley Forge, established by the Pottses, whose name survives in Pottstown.

The little business of Thomas Rutter has grown in two centuries to miles of mills. But nature has paid for the progress. Desolate places blacken western Pennsylvania. The drum of its rollers, the pound of its hammers, the smoke and the dumps mar many sections. Residents may resent the smoke pouring over the land, but when it is absent and furnaces are silent, everyone would have them busy again.

The picturesqueness of these early furnaces is preserved for Pennsylvanians today in old prints. J. B. Pearse uses as the frontispiece to his *Iron Manufacture* (1876) an engraving of an "Old Furnace on the Conemaugh." This shows it not as a sore spot on the landscape but as one with its environment against a woodland background. Please refer to illustration of the Millcreek Furnace, facing page 33 of this book.

George S. King and Cambria Iron Co.

Johnstown was destined by its environment to become an iron and then a steel center rather than an agricultural community. Peter Goughnour's notes reveal why the Valley was not suitable for agriculture. Johnstown's industrial history is the history of iron and steel making in the United States, for Johnstown mills were the setting for the dramatic development in iron and steel production. Destiny determined the time, the place, the men, the product.



GEORGE S. KING

From Trail Dust to Star Dust

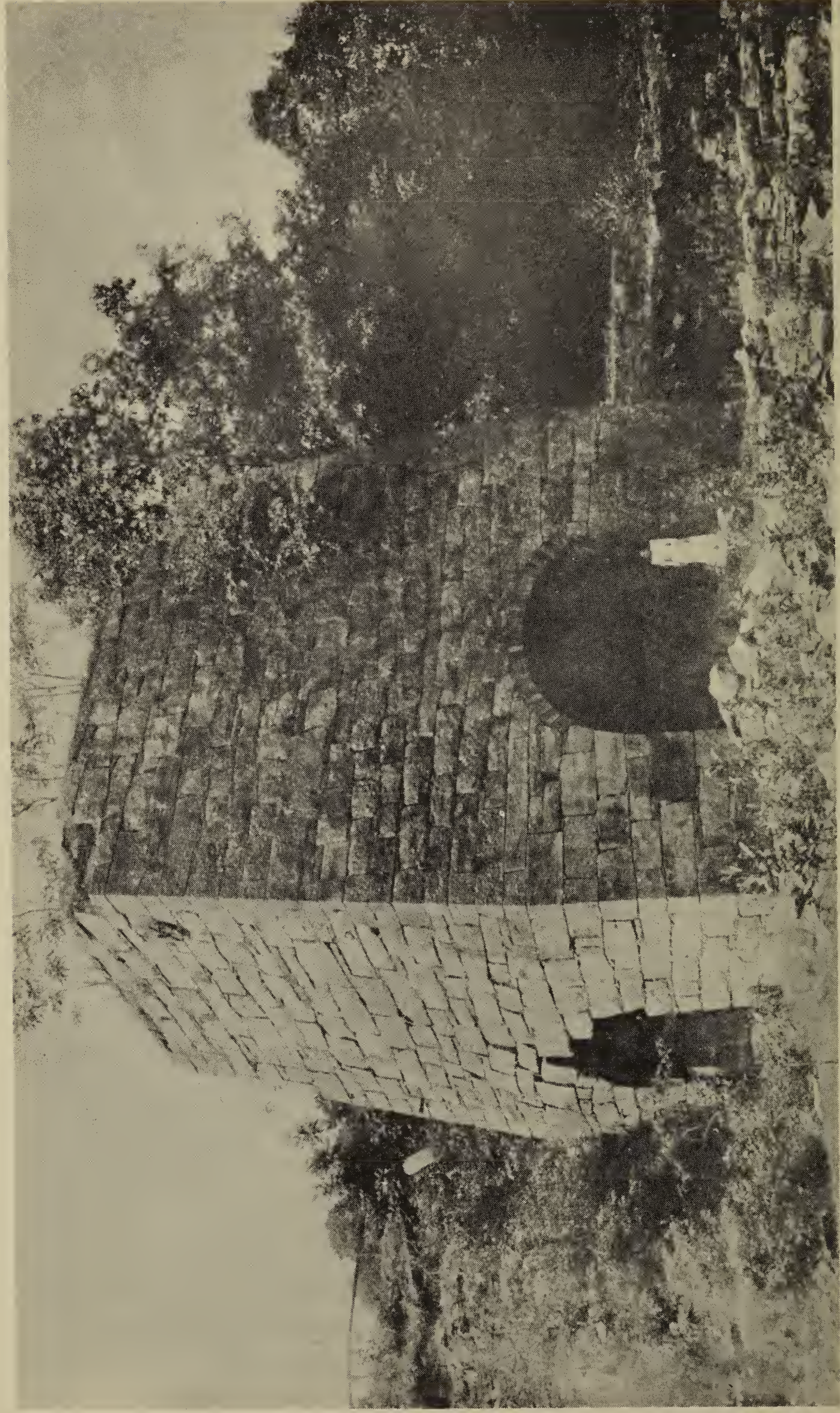
George Shryock King is the father of the iron industry in Johnstown. He came in 1833 from Mercersberg thinking that Johnstown would be a better business center than Mercersberg because the transportation facilities were better. The Pennsylvania Canal was being completed. He had been a store owner in Mercersberg at the age of 17; he opened his store in Johnstown when he was 24; he was the most honored citizen at the Centennial Celebration in 1900 when he was 91. Mr. King was the principal discoverer of iron ore in the Johnstown area, the pioneer in making iron from it, the prime founder of Cambria Iron Co., and the industrial founder of the Town. The *Johnstown Tribune* in his obituary of December 8, 1903 refers to him as "*beyond all doubt, the greatest benefactor Johnstown has ever known. The iron industry, which has grown to be the mainstay of the city, without his initiative and persistence might never have been firmly established.*"

In 1833, when Mr. King started his store, the Pennsylvania Canal and Portage Railroad had just been opened. Johnstown looked to him like a good place to start business. In 1840, however, the effects of the Panic of 1837 were so serious that there was actually no money in Johnstown. Mr. King came to the conclusion that if some means were devised by which the natural products of the vicinity, especially iron, could be taken to Pittsburgh, he could exchange them for groceries and other essential goods. At the same time he would be furnishing employment to men in the Town. He believed there was enough iron ore in the hills to carry out his idea.



TO MAKE KETTLES OR RAILS
WAS THE QUESTION IN 1850

(Please refer to page 35)



MILLCREEK FURNACE — Upper Yoder Township

Courtesy Cambria Public Library

George S. King and Cambria Iron Co.

The search started. A crop of ore was found in Ben's Creek. It was tested in Blair County and proved to be good bar iron but hard and brittle. A furnace built at Ben's Creek was called the Cambria Furnace. Another furnace was built near an ore mine below Coopersdale. Shortly after this, a better vein was found in Benshoff's Hill. This ore was hauled to the Canal and then hauled from there to the Cambria Furnace. Following this the furnace on the Mill Creek was opened and still others followed. Rhey's Furnace at the foot of the Prospect Hill was also called the Johnstown Furnace (1846). Between 1842 and 1846 Johnstown's future was firmly established. Soon about 25 furnaces had sprung up over the local area. These furnaces were bought and sold in rapid succession. Mr. Bell, who owned the Millcreek Furnace and operated it only a year or two, sold it to become a "forty-niner." This furnace was also near an ore mine along Mill Creek. Nearly all furnaces were along streams because water wheels worked the bellows to provide the air blast. When Cambria Iron Co. was organized, it bought up these privately owned furnaces.

As Mr. King had anticipated, he was able to trade the pig metal in Pittsburgh. Shipped by canal, it was exchanged there for dry goods. He had, in truth, saved Johnstown.

At this time, there were four charcoal furnaces operating in the vicinity of Johnstown; Cambria, Benscreek, Millcreek, and Blacklick. Coke was not made here at the time, and so charcoal had to be used to heat the furnaces. Consequently much of the timber from the hills was used. When Cambria Iron Co. bought the local

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furnaces, their purchases included 25,000 acres of timber. The original growth of walnut, oak, and spruce was burned to make the charcoal.

These early furnaces had an output of four to five tons of pig metal per day, the market value of which was \$22 to \$25 in Pittsburgh. Iron made in Johnstown was always a little lower in value than other iron because of its hardness. By itself it did not make good bar iron, but when mixed with Juniata pig or other softer metals in proportion to one-fourth Cambria, it made the very best iron in the market, especially for nails. Indeed, nails were cut from the Juniata nail-iron with a machine worked by a treadle. The heads were added afterwards by hand. In the census of 1810, it is recorded that 200 pounds of nails cost \$30.

It was necessary to keep these early furnaces constantly heated night and day, seven days a week. A furnace in Blair County was the first to introduce machinery whereby work could cease on Sunday. Consequently the place was called Sabbath Rest.

Until about thirty years ago, the furnace at Millcreek just off Menoher Highway (so-named in honor of Johnstown's General Charles T. Menoher, Commander of Rainbow Division, World War I) was the only one that remained and could be recognized as having been used. Unfortunately this historical landmark was dismantled. Its huge stones were used in building houses and clubs. Many of the stones were two feet square and four feet in length. The furnace was 30 feet square at the base and 45 feet high. Inside it was shaped like an egg—slender at the top. It rested on a "bosh" so that the raw material

George S. King and Cambria Iron Co.

would drop as it was consumed. Into the hollow thirty-foot stack were dumped iron ore, charcoal, and limestone. Then the blast was turned on, and the fired furnace was kept going. The molten metal ran out from the bottom of the furnace when it was tapped. Shaped into bars—sometimes shaped like large horseshoes to fit the horses' backs—it was taken to Ben's Creek by pack horse or wagon, hauled to the Canal and shipped. Millcreek's largest output was 1,050 tons per year.

Later, with the coming of railroads, the hardness of Cambria iron made it the best in the American iron-rail market. The rails made by the Cambria Iron Co. led all the rest, and the Pennsylvania Railroad always preferred them to any others. As the West was opened up, the demand for rails, plus the Canal for transportation, plus Cambria iron *MADE* Johnstown. It can be said that Cambria rails built the railroads of the West.

Johnstown might have remained and might have been known as the town that made iron kettles instead of iron rails. Kettles were much in demand at this time for the sugar industry in Louisiana, and Cambria iron was excellent for these kettles because of its hardness. It was then 1850, and iron making was established. George S. King, with his partner Dr. Peter Schoenberger, had made Johnstown an iron-making center. Both being men of vision, they foresaw the needs arising from the opening of the West to civilization. Dr. Schoenberger wanted a foundry to make iron kettles for sugar and molasses. Mr. King, however, had the foresight to see the greater need and the greater market for iron rails in the westward expansion of transportation.

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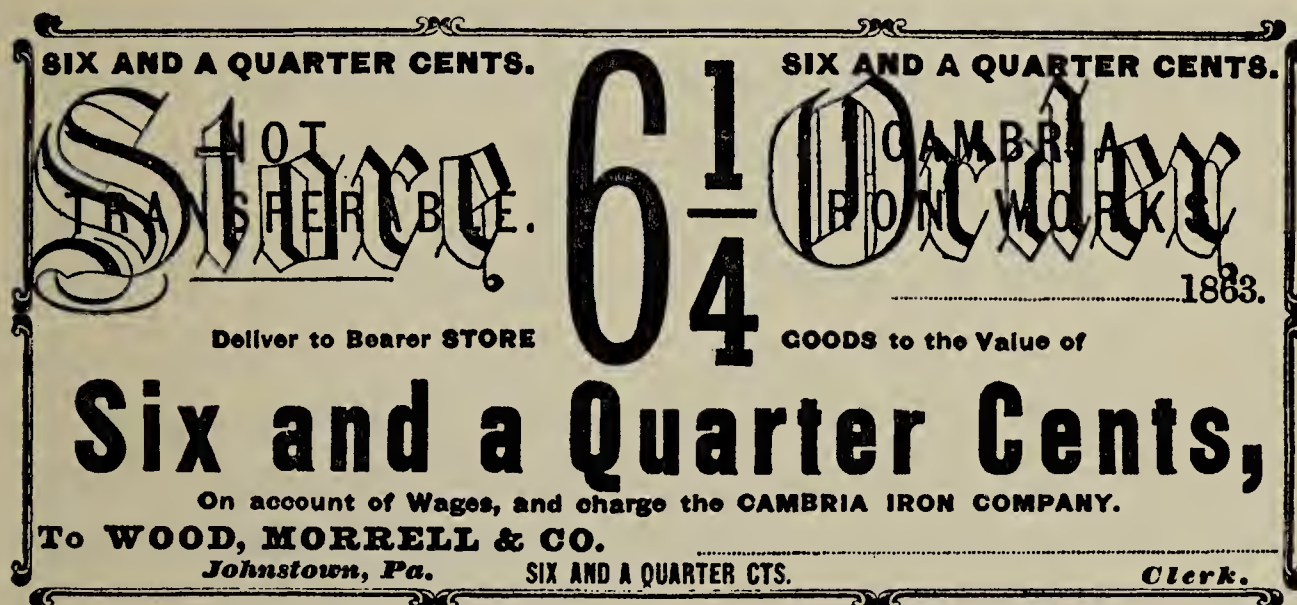
Mr. King became the benefactor of the Town. In need of money to finance his project, Mr. King went to Boston where he met men of the iron business. The Boston Company was interested and planned to build a rolling mill in Johnstown. On August 21, 1852, they sent a representative to Mr. Sech, who had a blacksmith shop in what is now Coopersdale, to make arrangements to obtain picks for getting the stone to build the mill. Drills, hammers, wedges, picks, and other tools necessary to quarry the stone were contracted for. Mr. Sech went to Pittsburgh and bought a boatload of iron. He and Joseph Masters, a young apprentice of fifteen years, contracted to make 37 picks each day until 6000 were made. With these tools the first rolling mill was built. Dragging the quarried stone to the Canal, the workmen loaded it on the boats, which took it to the site of the rolling mill. Much of the stone for early building and paving was taken from the Stony Creek river bed. (The name Stony Creek, replacing the Indian name Sinne-hanne, seems of little significance to the present-day citizens, for few boulders remain near the city, but up-stream, about fifteen miles, there are still very large boulders).

The Cambria Iron works was organized in 1852, but the Boston partners soon failed to meet their agreements, and consequently financial complications ensued. Meanwhile, the rolling mill had been completed in 1853, and had turned out its first rails in July 1854. To meet financial obligations, the mill was leased to Wood, Morrell and Co. of Philadelphia, with Daniel J. Morrell as superintendent. When financial affairs again became entangled by new partners and inheritors of estates, the stockholders of the Cambria Iron Co. met in 1861 and decided to

George S. King and Cambria Iron Co.

take over the property, operating it again as the Cambria Iron Co. To Wood, Morrell and Co., they paid the sum of \$51,099.35 for its equity in the concern.

In 1862 the Cambria Iron Co. was completely re-organized with D. J. Morrell as superintendent. The firm of Wood, Morrell and Co. was abandoned; the property was reconveyed by deed to the Cambria Iron Co. in September, 1862. The Country — engaged in a civil war — and the westward expansion created greater demands for rails, but again there was no money in ready cash. The company issued *scrip* in 5c, 6¼c, 10c, 12½c, 20c, and 25c notes. These the workmen used at the company's store in payment for produce.



The above scrip was printed in red and blue. It is reproduced here two-thirds size.

Prospect Hill, named no doubt for the ore prospected there, was a valuable factor in the location and the prosperity of the mill until the Bessemer steel process revolutionized the industry. Round Mound on Prospect Hill was purchased for \$800; the company later refused \$80,000 for it. The ore deposits, the abundance of coal in this hill (now used for making coke), and the transpor-

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tation afforded by the Canal put the furnaces where they are. Until the Bessemer process, the best iron ore on the market came from Prospect Hill. From there to Woodvale, there was a tunnel to bring out the ore to the mills. These mines were worked until 1871.

The rails made from this ore had a flexibility that other manufacturers could not obtain. Before the introduction of steel, the great danger to the railroad traveler during the winter months was accident caused by a broken brittle rail. Daniel J. Morrell used to relate with much satisfaction an incident which occurred on a western road. The foundation of a small culvert was washed away by a flood, and the tracks (made of Cambria rails) were left suspended across it. Over these tracks, the engine and train passed safely. This, Mr. Morrell thought, was a sufficient recommendation for the Cambria rail. Shorn of its timber and marred by the smoke and gas from the mills and furnaces, Prospect Hill has lost all its natural beauty, but it has been one of the great gifts of nature to industrial Johnstown. Men of foresight, plus iron ore, plus wood, plus coal, plus transportation combined to make *Johnstown a city resulting from its environment*.

In 1898, the Cambria Iron Co. leased its property to the newly incorporated Cambria Steel Co. The changes through the years have been as follows:

Cambria Iron Co.	1852 - 1855
Wood, Morrell and Co.	1855 - 1862
Cambria Iron Co.	1862 - 1898
Cambria Steel Co.	1898 - 1916
Midvale Steel and Ordinance Co.	1916 - 1923
Bethlehem Steel Co.	1923 -

The present plant comprises five divisions: the Franklin Mills (Coke Division, Blast Furnaces, Open Hearth, and Steel Cars), the Lower Works, the Gautier Mill and Shops, the Rod and Wire Mill, and the Wheel Division.

John Fritz

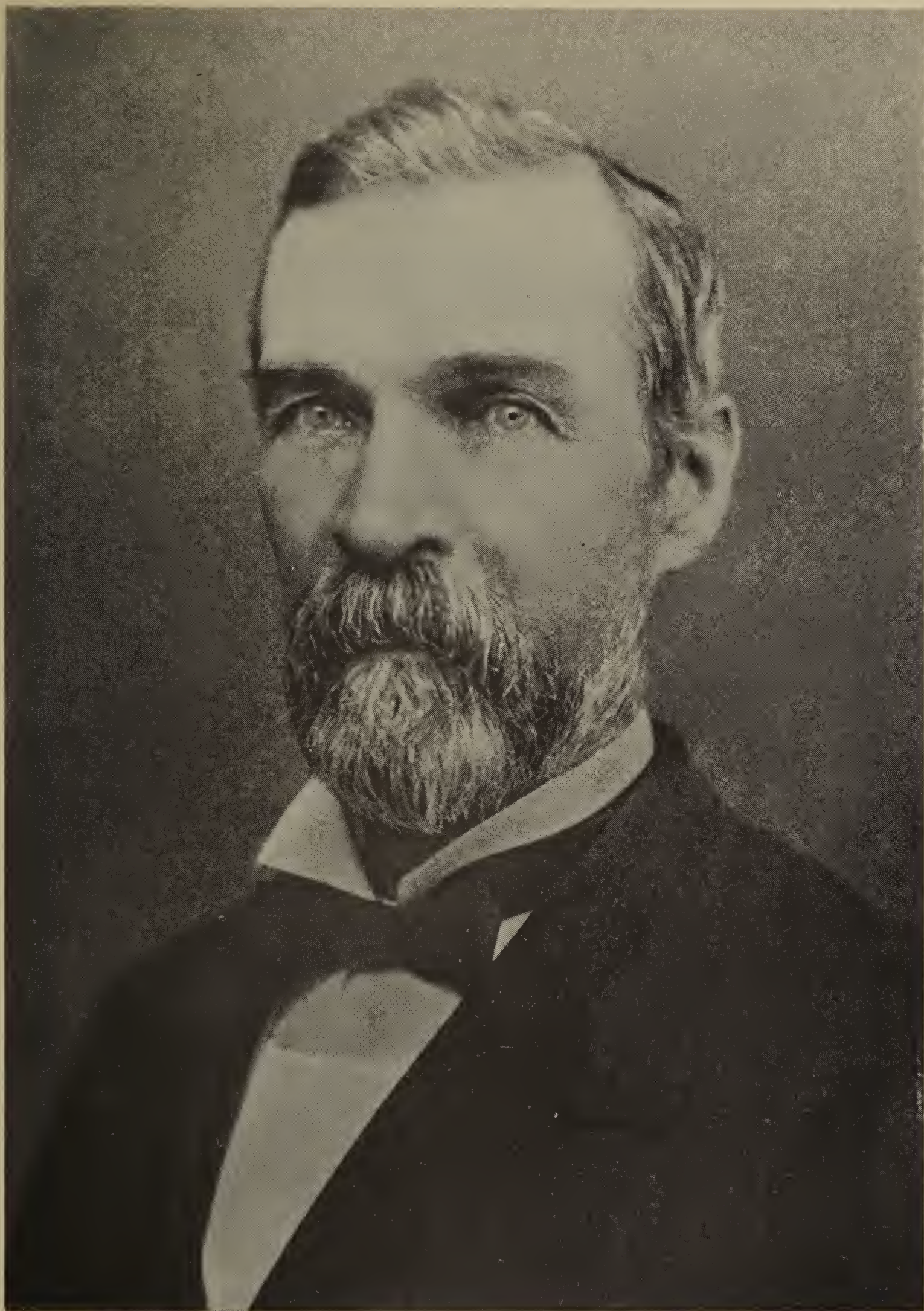
Mr. King had not only the foresight and the ability to recognize Johnstown's potential resources, but also the initiative, the faith, the persistence to develop them. John Fritz had the same powers that Mr. King had, plus the genius of the inventor. He came to Johnstown when Wood, Morrell and Co. leased the works. He was chief engineer and remained in Johnstown until 1860. He became an international figure in the steel industry. While in Johnstown, he invented the three-high roll mill for making rails, which was as revolutionary in its day as is the continuous mill of today. The three-high roll mill revolutionized the whole industry. To Mr. E. Y. Townsend, the Vice-President, Mr. Fritz always gave credit for the introduction of the three-high rolls and the many improvements which accompanied them, for other officials lacking his foresight had objected to the changes and the expenses involved in those changes. On the old two-roll mill, the rail bars could be passed through only one way. Then they were "idled" back and passed through again. By placing a third roll above the two, the bar could be passed back and rolled at the same time. This method doubled the output. Besides, it also prevented the

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bars from lapping around the rolls, a condition often causing accidents and extra work. It was with this invention in 1873 that 722 tons of rails were rolled in a week to exceed that of any other mill in the Country. The school geographies of the time pictured the Johnstown mill as the largest in the world. In a month's time the mill had made 300,000 tons of rails without a break. Rails were piled high along the Canal from where the fire-engine house on Washington Street now stands to Clinton Street. Washington Street at this time was called Canal Street—the main street of the town.

Cambria Iron Co. became financially successful with a rail plant superior to any other in the world. All this was not accomplished easily. Gloom, uncertainty, and even animosity on the part of the workmen, plus the objections of company officials, surrounded Fritz's pioneer attempts. The first mill, after its first successful run, was destroyed by fire, the origin of which was never fully determined. Suspicion rested on the workers themselves. The working man then as now was somewhat fearful of improvements and labor-saving machines which lessened jobs. Eventually, however, the three-high roll mill was responsible for the subsequent prosperity of the Cambria Iron Co. It held a prime position for both quality and quantity until the invention of Bessemer steel. The three-high roll mill gave to the company a prestige and impetus which has carried through to the present era.

Mr. Fritz left the Johnstown mills for those in Bethlehem, where he became plant manager for Bethlehem Steel Co. In 1902, to perpetuate his memory and in-



Courtesy Bethlehem Steel Co.

MR. JOHN FRITZ

William Kelly

The Cambria Iron Co. also played a prominent part in establishing the so-called Bessemer process in the United States. Mr. William Kelly, a native of Pittsburgh, came to Johnstown in 1857, probably because the Fritzes were here. Mr. Kelly previously had experimented in the Kentucky iron ore regions with converters for eliminating the carbon and impurities from pig iron by forcing a blast of cold air through the hot metal. After discouragement from other ironmasters, Mr. Kelly explained the pneumatic process to Daniel J. Morrell, the great Johnstown ironmaster, who took to it most readily. Mr. Morrell was shrewd and foresaw a revolution of the iron and steel industry. He furnished men and material at the Cambria plant to conduct a series of experiments on the Kelly Pneumatic Process. Mr. Kelly then built a new converter, the first of its kind ever built for making steel, and it is now on loan to the United States National Museum, in the *Smithsonian Institution*, from Bethlehem Steel Company. His first public demonstration before hundreds of witnesses in Johnstown was a failure due to technical difficulties, and the spectators were greatly amused, calling the failure "Kelly's Fireworks." Immediately a

William Kelly

second demonstration was arranged before an increased crowd of unbelievers, and this time Mr. Kelly was able to show the "doubting Thomases" a quantity of molten metal hammered by him into a thin plate—*the first pneumatic steel made in America.*

Here in Johnstown at that moment, laughter ceased, a new light had come to the world of steel making, and the visionary Irishman was now looked upon as a man of real genius. Many spectators lived to boast that they had seen the discoverer's first public demonstration of making steel from pig iron, with no fuel whatsoever, save cold air. A patent was granted to Mr. Kelly, and Daniel Morrell and other ironmasters began manufacture of steel by the Kelly Pneumatic Process. Mr. Bessemer, who may have worked for Mr. Kelly in Kentucky, later had a pneumatic process patented in England in his own name. Ingratitude and injustice followed on the part of many persons in the industry, and priority and originality of the two identical processes became a much-discussed topic of the day. Unfortunately, and because of Mr. Kelly's strained financial resources, as is the case with most inventors, the process became known as the Bessemer process. Mr. James M. Swank, general manager of the American Iron and Steel Association, stands so high as an authority on all matters concerning the history of the iron and steel industry, that his statements may be taken as the most reliable authority accessible. In his *Iron in All Ages* he says:

"Mr. Kelly claims for himself the discovery of the pneumatic principle of the Bessemer process several years before it dawned on the mind of Mr. Bessemer.

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*The validity of the claim cannot be impeached
The Kelly process produced refined iron of good quality.
Experiments were made in Johnstown, Pennsylvania, in
1857 and 1858. They were so very successful that Mr.
Kelly wrote from Johnstown on January 29th, 1858,
that he had not the slightest difficulty in converting
crude pig iron into refined plate metal by blowing into
it for about fifteen or twenty minutes."*

Mr. James Park, Jr., of Pittsburgh, one of the real kings of the steel world, in a prepared address delivered in Pittsburgh, said, "The world will some day learn the truth, and in ages to come a wreath of fame will crown Mr. William Kelly as the true discoverer of the Bessemer Process. He was the original inventor of the Pneumatic Process for making steel and yet another man gave it his name and reaped the honors and rewards for making what 'Pig Iron Kelly' called in his Masonic Temple address, 'the greatest invention of the 19th century.' "

Over a century has passed since Mr. Kelly made his experiments in Johnstown, yet historians cannot agree either on the true inventor of the pneumatic process for making steel or on the merits of the "*Pioneer Converter." With no one living today who witnessed the experiments, it seems highly questionable whether the mystery surrounding this controversial subject will ever be solved.

**Publisher's Note*—As late as 1959 the role of the "Pioneer Converter" in the history of the American steel industry was the subject of investigation.

George Fritz

Mr. George Fritz, brother of John Fritz, was chief mechanical engineer at Cambria when his brother was working on the three-high roll. George Fritz had a mind as inventive and brilliant as his brother. He devised a set of blooming rolls which were immediately adopted in all the steel works in the United States and abroad. When George Fritz died in the prime of a successful life, the London Engineering Magazine said:

"It is not too much to say that Mr. George Fritz and his brother, Mr. John Fritz, have created the American rail mill and established the success of the manufacture of steel; they have put their mark on every feature, not only of the rail mill, but also of the American rolling mills at large."

The blooming mill broke the ingots into smaller billets. These could be reheated in the rail mill and rolled into rails or used for whatever product was wanted. George Fritz while in Johnstown also invented a reversible engine which was important to the steel industry.

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Iron rails were made by casting the metal in the blast furnace, taking it to the puddling furnace, and then putting it through the squeezers. After this process, it was rolled into layers about 6" wide, 1" thick, and 5' long. Six of these were piled on top of each other and heated in the furnace until they were white hot and then they were rolled into a rail. After the Bessemer process and the blooming mill came into use, the steel rails did not have to be made in layers. The billets were simply reheated and rolled.

In 1873, the Cambria Iron Co. plant was the largest in the Country with nine blast furnaces, two Bessemer converters, a blooming mill for rolling steel ingots and six trains of rolls—25 sets of rolls in all. It was at this time that steel rails were piled high on Canal Street (now Washington Street) from the Public Safety Building to the Gautier plant which stands in the old canal basin. Most of these rails were used for the railroads from Chicago west, and most of the western roads were laid with Cambria rails, rolled in Johnstown. In 1878 two open-hearth furnaces were built. Among other contributions of the Cambria plant to the steel industry are the mechanical development of Bessemer steel-making equipment, the bottom-pouring of ingots, and the Coffin process for heat treating axles.

Daniel J. Morrell

To Mr. King must go the credit for his foresight and persistence in developing the native iron and its products and for his decision to build rails. To Mr. Kelly must go the credit for his contribution to the science of metallurgy and for his discovery of the pneumatic process for making steel. To the ingenious Fritzes must go the credit for skill in increasing production and giving the Cambria mills sufficient impetus to keep them going. To Mr. Morrell must go the credit for sound business ability—knowing how to organize—and for perceiving the growing demand for rails, particularly for steel rails. Above all he should be remembered for his faith and tangible interest in Johnstown and its citizenry.

Until 1871, the production of the Cambria Iron Company was iron rails solely, in the manufacture of which the company had acquired an excellent and enviable reputation. Mr. Morrell, however, saw early that the steel rails would displace those of iron on account of steel's greater durability. Just as Mr. King made the decision favoring iron rails over iron kettles, so Mr. Morrell had the Quaker foresight and courage to favor steel rails instead of iron rails. It was through his persis-

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tence and faith that the directors of the Cambria Iron Co. were among the first in the Country to consider the manufacture of steel rails. The first lot of steel rails rolled in America to fill an order were made in Johnstown's Cambria works in August, 1867, under the direction of Mr. Robert W. Hunt.

Mr. Morrell was interested not only in the business, but also in the welfare of the Town. Too often in industrial communities, the cultural life of the citizens is neglected. Mr. Morrell, being born of Quaker stock, believed in civic and cultural responsibility and development as well as industrial development. Quakers have always considered their most useful role to be that of pioneers. They are the "leaven in the loaf." Because a Quaker believes that God speaks directly to men as individuals, he feels a personal responsibility, *a concern*, to do what



DANIEL J. MORRELL

Daniel J. Morrell

he feels and sees should be done; and he must do it himself. This personal responsibility Mr. Morrell felt for his work and his workers. At the time of his death in 1885, Mr. Swank, editor of the *Johnstown Tribune*, said:

“Mr. Morrell might have kept himself aloof from the town and its people but he chose to regard himself as one of its number and gave influence and help to all civic improvements.”

Lorain Steel Company (now a division of the United States Steel Corp.), the second among Johnstown's steel industries, was founded in 1883. It was conceived as a user of unfinished products of the Cambria plant. Good transportation facilities and coal supply favored the location of the plant in the valley of the Stony Creek. Similar conditions plus the presence of iron ore had strung the Cambria plant along the Conemaugh River. Like Cambria, Lorain went through many “hard knocks” before brilliant invention, skillfull workmanship, and sound business ability brought rewards.

Mr. A. J. Moxham produced a *better* rail. A steel girder rail was replacing the flat street-railway rail laid on wooden stringers. The company's first “lay-out” yard was in part of the old Canal basin where the Gautier plant is now located. The present plant along the Stony Creek is in the section of Johnstown bearing Mr. Moxham's name, just as the Cambria mills are in the section along the Conemaugh bearing Mr. Morrell's name.

The Coal Industry

It is curious that on the early deeds in Johnstown no mention of coal rights is made—gold and silver were nature's buried treasures so eagerly sought. The earliest evidence of coal was discovered in a tract of land then owned by Louis Von Lunen in the district which is now known as Moxham. The richest deposits were first discovered in 1788 in a "stone coal bank" on the Stony Creek. Coal was first used locally for domestic purposes about 1822. In 1843 there were shipped from Johnstown 973 tons over the Canal and Portage Railroad. Early coal had been mined for blacksmith's use in the Juniata valley and was carried across the mountains on pack horses. According to the Federal records of 1840, there were 464,826 tons of bituminous coal mined in Pennsylvania. The most common fuel, however, until 1860 was wood. Eventually, coal from the hills surrounding the Valley replaced wood, particularly in making coke for iron furnaces, but not before most of the best timber had been cut.

When the iron industry began using coal, the local consumption grew rapidly. Coal became essential to the life of the mills. When Wood, Morrell & Co. took over,

The Coal Industry

the concern owned 25,844 acres of coal lands, plus the lands along the river and the railroad. By 1906 Cambria Steel Co. was consuming 1.6 million tons a year. Most of the surrounding hills became honey-combed with mines. Eventually, Johnstown became the center of a coal field which produces more than 400 million tons annually.

Lumbering

Lumbering is no longer an important industry in Cambria County. The following quotation from the *Tribune* for March 22, 1861, describes lumbering at its peak in the County:

“ . . . the Clearfield creek and its tributaries are filled for miles with logs cut in this county (Cambria) and intended to be floated out into the Susquehanna and thence to different points. The creek is so compactly filled in many places as to be completely bridged.”

The trees which supplied the lumber were white pine, cherry, poplar, ash, white and red oak, and hemlock. Now there is little salable timber left in the County. Hogsheads, made from the oak staves, were used for the molasses industry in Louisiana. The “shook shops” established in Johnstown for making these staves went out of business in 1875.

13

Exchange

How did the early settlers pay for goods bought?

In early days the prevalence of barter was a partial solution to the problem of money, but it was not always satisfactory. Paying the peddler with pork or pumpkins was often cumbersome. Companies and towns began to circulate currency of their own. Sometimes such currency was none too well backed, and the holder of paper money might find himself the possessor of banknotes not worth the paper on which they were printed.

The Indians for exchange used *Wampum*. Its value has been established by Samuel Weiser, son of Conrad Weiser, in a report of his expenses in 1760: "*To 667 grains of Wampum made in two strings of several rows, 1 pound, 13 shillings, 9 pence.*"

The earliest form of exchange in Johnstown, as everywhere else in the Country, was barter, for specie (hard money in gold or silver) was scarce in colonial Pennsylvania. No coins were made in the Colonies. There were no banks in Pennsylvania before the Revolution. The only bank in the state in 1790 was the Bank of North America, chartered by both Congress and the

From Trail Dust to Star Dust

Commonwealth. In 1793 the Bank of Pennsylvania was chartered.

In 1723 a law was passed in the State issuing paper money to the amount of 15,000 pounds over an eight-year period. This became legal tender. During the Revolutionary War, Pennsylvania, like other states, issued large quantities of paper money. Continental currency had also been issued. During the "dark days," the value of this paper money fell very low. So deplorable was the situation as a result of the Panic of 1837 and the promotion of internal improvements, that the State treasury was empty. Few private corporations were sound. Specie payment was suspended. Because many of the banks had been established under State charters with very weak backing, the value of their notes depreciated. These were known as "Wild-Cat" banks. People hoarded their gold and silver.

By the Act of 1840, all State banks had to resume specie payments by January 15, 1841, and pay all their liabilities in gold or silver, or forfeit their charters. To gain postponement, the banks agreed to lend the State sums in proportion to their capital; such sums to pay the interest on the State debt. Eventually the State was saved from bankruptcy and its debts were paid. Through this transitional period "Bedford" money fell and rose with that from other private banks. It was Bedford money which was accepted in Johnstown for real estate transactions by Adam Cover.

It is recorded that Hull Smith in 1840 opened a State Bank on Main Street near Clinton Street. One source

Exchange

states that the first banking institution in Johnstown was established in 1854 by Smith, Bell and Co., which introduced bank checks into local business practice. These checks bore a drawing of a rolling mill with a bloom going through the mills. This first bank was absorbed by the First National Bank when it started in 1863. Six years later, 1869, John Dibert opened the banking house of John Dibert and Co. These two are the only banking houses listed in the Business Directory of Johnstown in 1869. The Cambria County bank existed for only twelve years before it met with disaster. The Johnstown Savings bank was the fourth local bank, and it celebrated its 75th Anniversary in 1946.

A sound national money system was finally established. Americans can be everlastingly thankful that Jefferson in 1784 favored the decimal system, and so the United States currency was based on the Spanish system rather than on the English idea. The young Republic was averse to calling our unit of money a "crown." Besides, the Spanish dollar in a democratic society always had been more popular than the English crown. Early in the nineteenth century, particularly in the South, the Spanish dollar was literally cut with hammer and chisel into halves; the halves into quarters, and the quarters into bits, and these into "picayunes." It is interesting to compare these denominations with those of the scrip used by Cambria Iron Co. in 1865. (See illustration of scrip, page 37).

Transportation

A desire for better transportation to the West became a burning fever in the 1820's and 1830's. Steamboats were all right but what could they do for the West? Traffic followed the rivers. The cost of roads was high and the loads were small. Cheaper transportation would mean more wealth for the West.

Philadelphia, like Boston, New York, and Baltimore, was in distress. The Pennsylvania road (Forbes) did not improve with age and as a result traffic from Pittsburgh tended to swing south and over the National Road to Baltimore. But Baltimore was aware that western traffic was going down the river to New Orleans. New York was in danger of having New Orleans become the ranking port of the United States. Each eastern city wanted improved connections with the West to draw business from New Orleans.

Canals seemed to be the panacea for the ills of transportation. Enthusiasts talked of linking the Atlantic with the Pacific through a system of canals. What could be better than the easy movement of canal boats over the smooth paths of water connecting all the important centers of the Country? The panic of 1837 killed the

Transportation

enthusiasm and a new panacea restored energy—the railroads. In fact, it was overexpansion of canals beyond their possible usefulness plus excessive loans for their completion that helped produce the financial panic of 1837.

Pennsylvania's rivers cross through rather than parallel the mountain ridges. Therefore, the first travelers followed the rivers, settled along them, and sent their products down streams. The first products of Johnstown were carried by canoe on the rivers or by pack horse over the trails. These were maple syrup and nuts (in great abundance)—hickory, walnut, beech, and chestnut. When the manufacture of iron began, these products were carried by mules or pack horses to Pittsburgh. Later the raft and the flatboat replaced the animals. After the mulepacks came the turnpikes and Conestoga wagons which traveled the paths that had followed the waterways. First the canal, then the railroad, and then the modern highways followed the pattern of paths established by the Indian trails.

Because the Erie Canal insured New York the place of highest rank as a port of entry and distribution to the West, Pennsylvania realized its resulting disadvantage in position. It was flanked by the Erie Canal to the north and by the National Road to the south. Pennsylvania, to meet the emergency, ordered a survey of the feasibility of digging a canal across Pennsylvania to the Ohio River. Pennsylvania was rightfully worried about Philadelphia losing trade to New York due to the Erie Canal which gave direct water transportation to the newly and quickly developing West. Realizing that water trans-

From Trail Dust to Star Dust

portation is cheaper than any other type of transportation and that the railroads were still in their infancy, the State Assembly passed the Act of March 27, 1824. This act provided means to find a practicable route to connect the East with the wild and rapidly growing West, a route wherein the Allegheny Mountains were the difficult division line. The Pennsylvania Canal was the result of this investigation. The Canal served as the chief means of transportation across the State until the railroads were established.

The history of the United States more than that of any other country in the world has been the history of transportation. Indeed transportation might be called the warp upon which the woof of our material growth is woven. This cohesive, interdependent economic whole result has been completed by waterways, highways, and airways.

The gigantic Pennsylvania Railroad was not original in its location. Defense played an important part in its founding—a defense by Philadelphia against the effort to draw all traffic of the northwest to New York's Erie Canal and a defense against the threat of Baltimore to replace its National Pike with a steam railroad to the growing West. The vital urge to develop the West had become important before the Revolutionary War. The expedient thing to do was to follow a makeshift route via railroad from Philadelphia to Columbia (Lancaster) and canal between Columbia and Hollidaysburg.

Pennsylvania had the most difficult problem of the three routes. Its first attempt, the Pennsylvania Canal, had not been successful. The railroad was the second attempt. The apathy in Pennsylvania in the face of the

Transportation

contemporary developments in transportation by her neighbors may partly be laid to Quaker conservatism but more so to the disjunction which existed among the different parts of the State caused by the geography and conditions of settlement. The rich agricultural sections of Pennsylvania to the south were nearer to Baltimore than Philadelphia, and their settlers more closely connected by blood. Why should they support a scheme to benefit Philadelphia? The settlers west of the mountains to the south and east of Pittsburgh were quite different from the Philadelphians. Therefore, their interests lay elsewhere. Perhaps the greatest cause of apathy was the forbidding nature of the topography of the land.

The United States has been a frontier nation through most of its history. For over two centuries settled America could look west toward dimly known mountain ranges, vast forests, unexplored streams, and immense prairies. The American West beckoned alluringly to the ambitious, the restless, the discontented, and the lawless. The whole course of American history was conditioned by the existence of a sparsely settled frontier that pushed continuously into the Indian country.

There were two routes in Pennsylvania leading into the West. The first, the Kittanning Path, ran along the Susquehanna and Juniata Rivers to the mountains, and across the Appalachians to Fort Pitt, originally Fort Duquesne and now Pittsburgh, on the Ohio River. Today the Pennsylvania Railroad follows this route. The second, the Forbes Road, ran through southern Pennsylvania from Philadelphia to Fort Pitt. Today it is, in general, the route of the Lincoln Highway.

The Pennsylvania Canal

The great West—all the country west of the Appalachian chain—had begun to attract farmers and other permanent settlers before the Constitution was ratified. The population to the west especially in Kentucky and Tennessee was increasing much more rapidly than in the older eastern states.

The importance of water courses is indicated by the population of Pittsburgh, Cincinnati, Louisville, New Orleans, Detroit, Cleveland, and Chicago. All these towns owed their growth largely to the opening of the Erie Canal, which had a nine-year start on the Pennsylvania Canal. Grain and livestock, nearly half of the national total, came from these sections. Those towns in the southern portion favored the route via the Ohio and Mississippi rivers and the overland route to Baltimore. Philadelphia, Pennsylvania's port city, would soon be cut out of the race unless communications were radically improved.

THE ROUTE of the Pennsylvania Canal, opened in 1832, was by rail from Philadelphia to Columbia (Lancaster), thence by the west branch of the Susquehanna and the waters thereof to the Allegheny Mountains, over

The Pennsylvania Canal

the Alleghenies by rail, and then by water from Johnstown to Pittsburgh. From Philadelphia to Columbia, the eastern terminus of the Canal, there was a railroad 81.6 miles long. The Canal then followed the Susquehanna and Juniata rivers to Hollidaysburg. From Hollidaysburg to Johnstown, canal boats were hauled by the Portage Railroad over the mountain and through it. At Johnstown the boats were put into the Canal again and taken to Pittsburgh by way of the Conemaugh and Allegheny rivers.

From Pittsburgh to Johnstown, the system consisted of a canal with locks and dams; from Johnstown to Hollidaysburg a railroad with planes and levels on which cars were drawn by horses, afterwards by locomotives. It was a combination of steam, water, horse-power, and man-power. Completed during the presidency of Andrew Jackson when great progress was being made in arts and sciences, it stands as an important monument in the great epoch of transportation advancement in the history of the United States; and it makes Johnstown one of the landmarks in the development of national methods of transportation.

A BASIN was essential to the operation of the Canal, for the loading and unloading of boats, and for the transportation of goods in bulk from the railroad to the boats and vice-versa. Just as today the railroads must have their great yards and the freighters their docks, so the canals needed their basins. There were two basins on the Pennsylvania Canal—one at Pittsburgh, the other in Johnstown. The latter occupied the ground between Clinton and Railroad streets on the west and south, and

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the *Five Points* and Portage Street on the east and north. It was semicircular in shape. At its greatest width, it was 200 yards; its length was 600 yards. On both sides of the basin were warehouses with docks or slips on each side so that two boats could be loaded or unloaded at the same time. The first slip was used by the packet boats or passenger boats. The packet slip was the center of attraction, for people thronged here to see the arrival and departure of passengers from the East and West. Here or on the east side of Central Park the town folk received their mail which was placed in a large clothesbasket. A warehouse occupied a strip of land about 75 feet wide, and the slip was about 15 feet by 80 feet. The local warehouses are still located in this area. The tracks of the Portage Railroad ran on State ground to Clinton Street between the basin and Railroad Street (so-called for the Portage Railroad).

The land between the basin and the Little Cone-maugh River from *Five Points* to the waste weir was called Long Island or more commonly the Island. From the waste weir at the entrance of the basin to the aqueduct in the rear of the Cambria Iron Co. offices, all the land lying between the Canal and the river was known as Goose Island. It was so named probably because so many Germans living in the area kept geese. The Buck-walter grist mill stood on the island side of the race just below Franklin Street. The *Five Points* were so called because five thoroughfares converged at that place — Portage, Railroad, Church, and Depot Streets, and the old Portage Railroad lying on State-owned ground. The

The Pennsylvania Canal

railroad was the connecting link of the land and water systems of transportation.

The business center of Johnstown in canal days was on Canal Street (now Washington Street). Next in importance were Clinton, Railroad, and Portage Streets. The Hulbert House, a prominent hostelry, was on Clinton Street. Mr. George King in 1833 bought the lot on the northeast corner of Main Street and Franklin Street for his residence. Franklin Street at the time was called Morrison Avenue.

Water for the basin and canal was let into the former through a sluice from the Little Conemaugh at *Five Points* and also through a forty-foot feeder from Suppes Dam in the Stony Creek. The feeder came down along the present line of the Baltimore and Ohio Railroad, over what is now called Feeder Street. The Canal itself was about 60 feet wide and four to six feet deep. The width of Feeder Street was determined by the width of the feeder. Shortly after the Canal was put into operation, it was found necessary to have a reserve body of water for dry seasons. Consequently, the State began to construct the South Fork Reservoir about 16 miles from Johnstown at an altitude of 400 feet above the city.

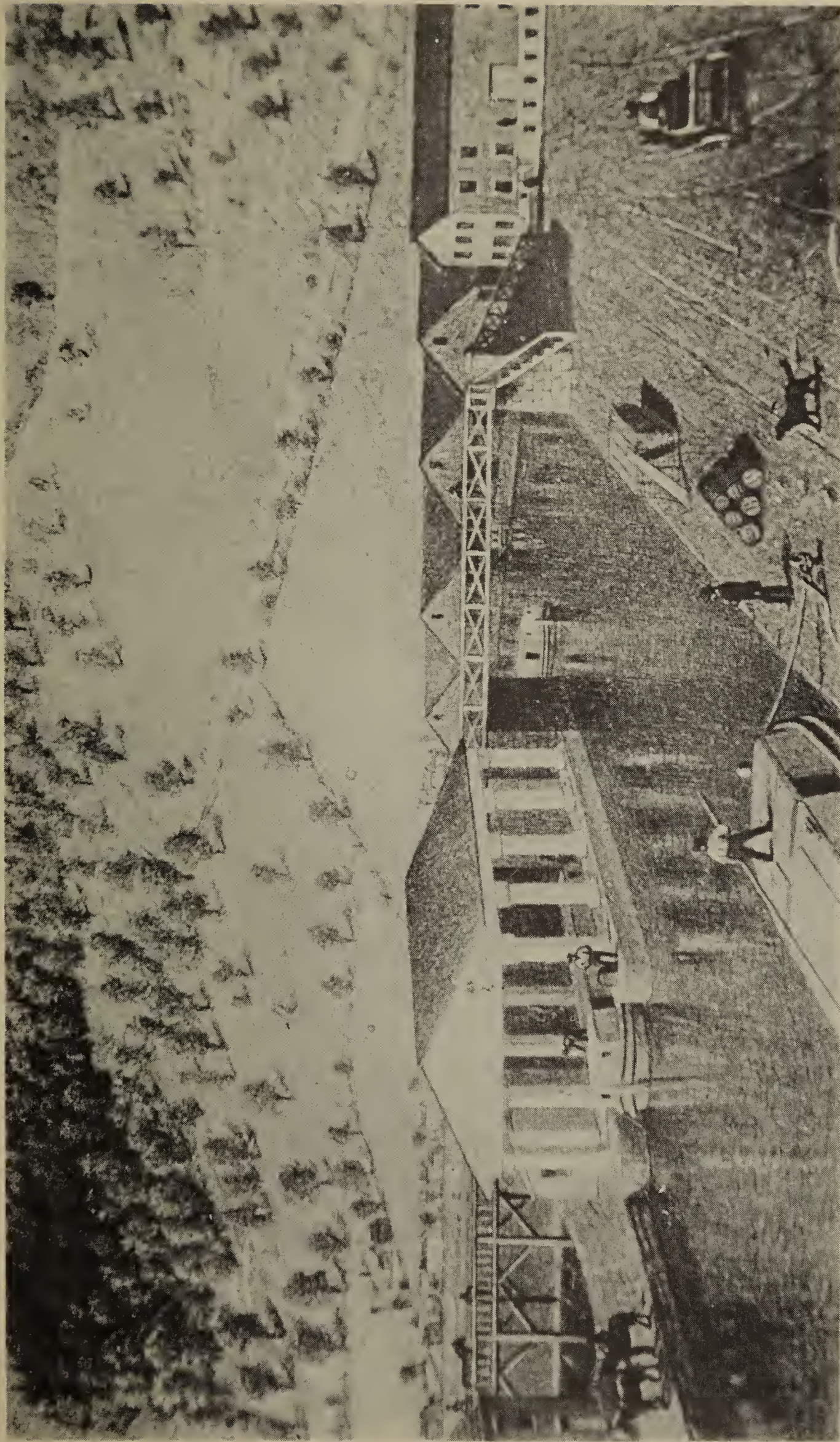
THE SOUTH FORK DAM was immense, having a basin of 32 acres; it was fed by 48 square miles of quick-draining mountain slopes and was therefore quick to rise. In fact, it was the largest artificial body of water in the United States at the time. Its length was three miles and it was from one-fourth to one mile wide. At the breast it was 72 feet high. Water in the dam was sufficient to fill enough barrels to girdle the earth. Having exhausted

From Trail Dust to Star Dust

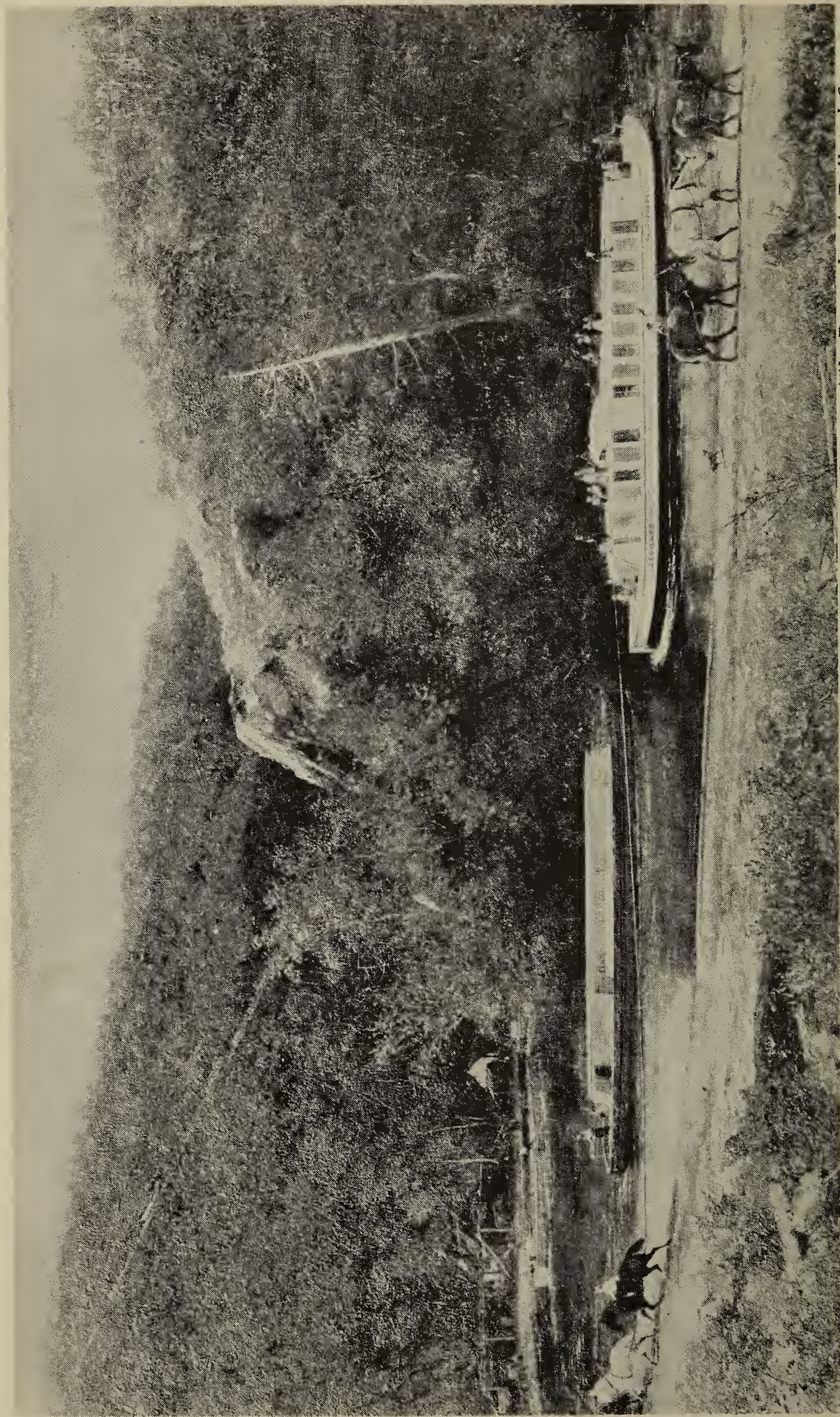
its finances, the State could not complete the dam, and so abandoned it for a few years. In 1845 it was eventually completed and water was stored. In 1847 it broke for the first time and caused considerable damage to the basin of the Canal. In 1862, two small breaks occurred without serious damage. Again it was abandoned. In 1880, it was purchased by the South Fork Hunting and Fishing Club, a group of wealthy men from Pittsburgh, who "repaired" the dam and increased the height of the breast to ninety feet. Having been "reinforced" with stumps, sand, loam, rubble, and straw, and having no proper facilities to discharge its waters, the breast could not bear the strain of the mighty force of water behind it in the spring of 1889 and so broke with terrible and tragic results to the Valley, to the Town, and to the people living in it.

*"All the horrors that hell could wish,
Such was the price that was paid for—fish!"*

THE WEIGHLOCK was on the north side of the Canal at the entrance to the basin. Until the weighlock was built in 1835, all boats with their lading were weighed in Pittsburgh. The manner of weighing was interesting. After the boat had been run into the lock, the water gates at either end were raised and the lock, being made as watertight as possible, was drained through a race leading to the waste weir. The boat, left resting on the cradle or frame of the scales, was as accurately weighed as if it were on land. Then the gates were lowered, and water let into the lock until it became level



THE WEIGHLOCK — PENNSYLVANIA CANAL



Courtesy The Pennsylvania Railroad Company

PEACEFUL SCENE IN CANAL DAYS — TOW MULES OR HORSES PULLED THE CRAFT

The Pennsylvania Canal

with the water of the Canal. After the boat was weighed, the toll was paid, and clearance papers were delivered. Several times along the way, the captain would have to show these papers to prove his clearance.

THE BOATS, at first, were 8 feet wide and 16 to 20 feet long. Later, section cars were invented. These were designed in three sections which, when coupled together, made the boat the size of a regular line boat of 70-foot length, 16-foot width, and 8-foot depth. The sections were detached and hauled over the Portage Railroad to Hollidaysburg, where the three parts were placed in the Canal, coupled together, and taken east. Later a four-section boat was used (1842). The section in the bow was used for the mules or horses, feed, and harness. The two middle sections were for merchandise, and the last one for the living quarters of the crew. These sections were, in reality, the forerunners of the idea of bulkheads which today are so essential to the great ocean-going liners. Each was made, however, to serve a different purpose.

THE MOTIVE POWER was six mules or four horses to each boat; three mules or two horses were used in service while the others rested in the bow of the boat. If the trip was not a hurried one, sometimes either one horse or two mules were used. This "tractor power" was changed every six hours, the term being called a "trick." This term is still used by railroaders for a "turn." At the same time the horses were changed, the driver and the steersman changed places.

Human muscle plus skill moved the boats from water to rail; also, from one place to another in the basin or

From Trail Dust to Star Dust

from the basin to the weighlock. With the help of a twenty-foot pole a man on each side of a boat could shift it from place to place.

THE VIADUCT, spanning the Little Conemaugh River about eight miles from Johnstown, was a magnificent piece of early engineering. It was, indeed, considered the most perfect arch in the United States, perhaps in the world. The Pennsylvania Railroad used it until its destruction by the great flood of 1889. When it was built, it was the highest single-span arch known. It was a semi-circular arch of 80-foot span; the whole height of the walls above the foundation was 78½ feet. The Viaduct, like the tunnel, shortened the railroad by two miles.

LOCKS AND DAMS were necessary for the movement of the boats through the Laurel Hill Gap to the west. Between Johnstown and Blairsville, there were 35 locks, five dams, and two aqueducts across the Conemaugh. The first lock out of Johnstown was located near the blast furnace of the Cambria Iron Company, now Bethlehem Steel Co. A boat drawn into a lock could be lowered or raised in a few minutes to the depth or height of nine feet.

THE CANAL RAILROAD was called the Portage Railroad. The word *portage* means a break in a chain of water communication where the boat must be picked up and carried. Commencing at *Five Points* and ending at Hollidaysburg, the railroad was 36 miles long. The railroad, one of the first to be built in the Country, was opened in 1834, just two years after the Canal went into use. There were 11 levels and 10 inclined planes. The

The Pennsylvania Canal

total rise was 1,138 feet. The Staple Bend tunnel used on the road was the first railroad tunnel in the United States. It may still be seen and is today a monument to the imagination, skill, energy, and boldness of American construction of 125 years ago. On the levels, the cars were hauled by horses—four horses to a freight train of five or six cars, each of which was about eight feet long. Later, locomotives were used for the hauling. The trains were taken up and let down the planes by stationary engines. One of these engines is preserved in the Blair County Historical Museum in Altoona. In 1843 one of the first wire ropes made was put to use on Plane No. 1. A safety car, to stop the cars should the rope break, was invented by a Johnstown man, Mr. John Tittle, and was adopted by the State. The rails (brought from England, the world's best rail market at the time) rested on stone blocks instead of cross ties. Each block supported one rail and was about 18 inches deep with a face 2 feet square. These "ties" were later used to build the present Franklin Street Methodist Church.

The Portage was a daylight railroad. One passenger train each way per day was the schedule. Several overnight hostels along the route are still standing. Freight trains stopped at the first place after sunset and remained until sunrise next morning. The only inland competitor of the old Portage road for western and southern trade was the National Turnpike with its Conestoga wagons going from Pittsburgh to Cumberland and a railroad from Cumberland to the East. The products of the West and South were brought to Pittsburgh on the Ohio River

From Trail Dust to Star Dust

and at Pittsburgh were transferred over the Johnstown route, for it was the best and most economical for nine months of the year.

The season was from the early part of March until December, sometimes until Christmas. Charles Dickens in his *American Notes* of 1842 describes a trip on a packet boat—the scenery, the accommodations, the food, the people, all of which were “wholesome and good.” He was much amused by the boatmen’s ability to spit tobacco juice to mighty distances. Another interesting and vivid account of a similar trip on the Pennsylvania Canal is a volume entitled *Peregrinations of Peregrin Prolix*. “Peregrin Prolix” was a pen name for an English writer who made the trip and then described it in a series of letters. The missionaries of the day, however, report that there were “some awfully precocious specimens of depravity among the crew.” It must be remembered that the missionary’s code of that day was very strict, and the wit of the Irish workmen who built the Canal and manned the boats was very virile.

In 1850 the canal system served as a funeral train for the body of President Taylor. “Old Whitey,” his horse, led the cortege down Railroad Street, as transfer was made from railroad to canal in Johnstown.

The Pennsylvania system of traveling and transporting goods was the best method of the period. The average time of a round trip between Pittsburgh and Philadelphia was three weeks for a freight boat and one week for a passenger or packet boat. This, of course, included time for loading and unloading, for “laying-up”

The Pennsylvania Canal

on Sundays, for detention due to trouble, or for a tie-up to let some of the crew attend a country dance. Today, by air, the round trip can be made in four hours instead of seven days!

It is generally believed that Pullman and Woodring brought out the first dining car and sleeping car, but the original ones were really used on the old Portage road twenty or more years earlier, when the immigrant travel was heavy. The section cars had but one compartment for cooking, eating, sleeping, and storing of food, a little den about 8 by 12 feet. The regular passenger cars and trains stopped for meals at the two or three hotels at the foot of Plane 2, near the town of Portage. Here was "a good and a popular place for a frolic."

A relief map of the old Portage Railroad with diminutive cars to show how the section boats were carried over the mountain is exhibited in the Pennsylvania Railroad Historical Department in Philadelphia. Besides the stationary engine, the Blair County Historical Society has some other good models, too. They also have ties and some of the original rope used in the railroad. The Pennsylvania Railroad bought out the canal system in 1851. It followed the course of the Canal, thus putting Johnstown on the mainline of the Pennsylvania Railroad. Johnstown is truly indebted to the Indians who blazed the trails which the Canal followed.

The redmen not only followed the water courses in their canoes, but they also made their way on foot over the trails that clung to the long ascending slopes and held persistently to the dividing ridges. The ridge

From Trail Dust to Star Dust

roads eventually were the natural successors to the ancient trails. Our nation then became a nation on wheels. Inevitably, however, came the desire to lower these paths from the heights, and it was the riverways to which men looked for the solution of their problems of inland commerce. Benjamin Franklin's word of warning, "rivers are ungovernable things" went unheeded and a vast network of inland waterways, such as those existing already in Europe, began. State vied with state. The Pennsylvania Canal was part of this vast, cumbersome, expensive network of canals, roads, and railways.

It was the birthright of the New World democracy to make its own mistakes and in so doing to prove for itself the errors of the Old World.

Just as the present is understood and experienced through the past, so the future is anticipated through both. The Erie Canal which followed the Mohawk trail became the path of the New York Central Railroad. The trail through the Cumberland Gap became the National Pike. Baltimore began the canalization of the Potomac which resulted in the Baltimore and Ohio Railroad. Philadelphia, not wishing to lose its trade to New York, followed the trails of the redmen through Pennsylvania to Fort Pitt to build the Pennsylvania Canal, which in turn laid the right-of-way for the Pennsylvania Railroad in 1851. The rivalry of these three great cities resulted in the development of the three great railroad systems in the East. Today, "*trail dust gives way to star dust.*"

The Pennsylvania Canal

Even though the millions spent by the State for canal projects almost put the State into bankruptcy, the Pennsylvania Canal, so far as Johnstown is concerned, encouraged the expansion of the iron and steel industry and placed Johnstown on the main artery of transportation. Besides, it made transportation costs for commodities cheaper. In early days of trail and paths, to transport a barrel of flour between Pittsburgh and Philadelphia cost \$14. In 1835, by canal, it cost \$1.12½. In 1907, by rail, 22c. Before the days of the Canal, when there were no roads through the wilderness, the most necessary foods were high priced. Coffee was 50c a pound; shad, 50c each; salt, \$5 a bushel; wheat, \$2 a bushel. These prices may not seem high in the present-day inflation; but, when the average daily wage of the workman was about 50 cents, they were extremely high. Johnstown, being a stopping-off place to transfer from rail to canal, gained new contacts with the rest of the Country. Many prominent persons passed through. Business and professional men, artisans and laborers were attracted to the growing community. The busy and profitable years of the Canal were from 1834 to 1851. Then change — so paradoxical, permanent, and persistent in all ages — brought the Pennsylvania Railroad to Johnstown and made all-weather transportation possible.

On August 29, 1851, *The Tribune* bore the following heading to an article: "*Last of the Packets and the First Train.*" The first train went through on August 25, 1851. The Canal was finally abandoned in 1863. Between the coming of the railroad and the complete abandon-

From Trail Dust to Star Dust

ment of the Canal, there were topics such as these that were recorded in *The Tribune*: On April 18, 1855, a steamboat; Ephraim Stitt of Blairsville, last captain to carry freight from Pittsburgh; pig iron still being carried in 1859; Knowlton of Walnut Grove runs a flat boat between Johnstown and Conemaugh in 1860; on May 1, Pennsylvania Railroad, the purchaser of the Canal, abandons it between Johnstown and Blairsville.

Today there is no trace of the Canal in Johnstown. It is completely filled in. The Gautier division of Bethlehem Steel Company stands in the basin.



Courtesy The Pennsylvania Railroad Company

PORTAGE RAILROAD — CARS BEING PULLED UP AN INCLINED PLANE



Courtesy The Pennsylvania Railroad Company

PORTAGE RAILROAD — SECTION BOATS

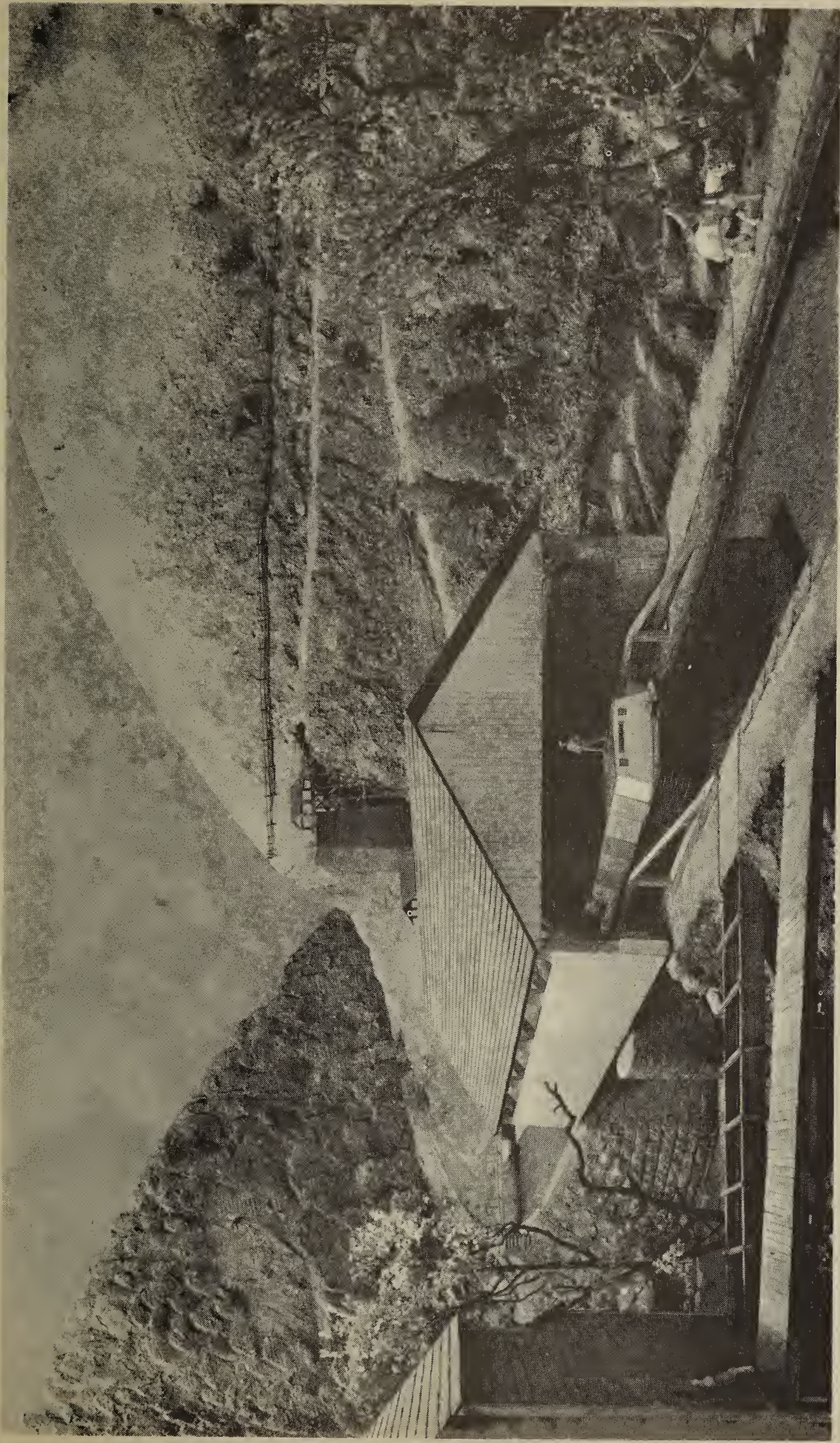
Note small SAFETY CAR (a Johnstown Invention) in front of first boat

(Please refer to page 67)



Reproduced from a diorama — Courtesy Penn Traffic Co.

THE BASIN — PENNSYLVANIA CANAL



Reproduced from a diorama — Courtesy Penn Traffic Co.

THE AQUEDUCT — PENNSYLVANIA CANAL

(Please refer to page 75)



Reproduced from a diorama — Courtesy Penn Traffic Co.
 ORIGINAL PENN TRAFFIC STORE



Reproduced from a diorama — Courtesy Penn Traffic Co.
 PENN TRAFFIC STORE IN 1907

Ferries, Fords and Bridges

The story of transportation in Johnstown would not be complete without something of the fords and bridges which crossed the two rivers. At first there were only fordings, the best known one being the Beula (Beulah or Buel) Fording near the present Franklin Street Bridge. The crossing received its name from the road leading to Stoystown from Beula. This was a Welsh community in the north of the County, three miles from Ebensburg. Although short lived, it was a thriving town with schools, hostels, even a library; but when Ebensburg became the county seat in 1804, Beula became a dead town. Nothing remains of it today except an historical marker.

Early methods of passage, for foot travelers as well as wagons, across the rivers were the ferries and fords. Adam Trefts had a ferry on the Stony Creek near the present Haynes Street bridge; and Joseph Haynes had a ferry at Market Street. Gray's ferry operated between *The Point* and the west end of the present Stone Bridge. When the water was high, it was not unusual for a merchant crossing a ford with his wares in his wagon to have everything dumped into the swiftly moving waters. The first fording on the Stony Creek was probably at the

From Trail Dust to Star Dust

mouth of the old feeder at Suppes' Dam. Jacob Stutzman operated a ferry here. The fording that the people coming from Somerset used was the old Beula Fording, crossing at Franklin and Willow Streets. The fordings near Walnut Street were many, because people going to Westmoreland and Indiana counties and to Ebensburg crossed here. Where the Woodvale bridge now is, there was a fording used from earliest days to reach Hildebrand's grist mill at Sylvania. Another fording called Broad Fording (400 feet wide) was near the present entrance to the lower mills. Peter Daniels, whose ferry was on the Little Conemaugh opposite the Woodvale mill, charged 3c per person; when the river was high and the current strong, the cost was a "fip," a fivepenny bit or fivepence, worth 6¼ cents.

Naturally, the bridges replaced the fordings. On June 3, 1817, the court appointed Adam Cover, William Spence, and A. Murphy as viewers to meet viewers from Somerset County to locate a bridge across the Stony Creek at or near Fox's Fording which was near the Red Bridge, or what is known today as Kring's. This was the first bridge across the Stony Creek. In traveling between Somerset and Beula or Ebensburg, people crossed the Stony Creek at the Beula Fording when the river was fordable, but when the water was high it was necessary to cross at Fox's Fording and come down Von Lunen Road. On the same date, another board met to locate a bridge over the Little Conemaugh. The first bridge over the Conemaugh was erected in 1829, when it stood for only one night and fell of its own weight. It was located between the present Walnut Street bridge and the aque-

Ferries, Fords and Bridges

duct (nearer the latter). The aqueduct was directly behind the Penn Traffic store. Over this, horses and riders could pass on the tow path, but it was not wide enough for vehicles. The highways on which these fordings occurred were the main thoroughfares between the Laurel Hill Gap and Ebensburg.

The first Franklin Street bridge was built in 1842. It was a covered bridge as were all the bridges of that day. This was a toll bridge which cost the foot traveler one penny to cross. It was partially washed away in 1857, replaced, and served until 1866, when it was destroyed by a big ice-gorge. It was replaced by an iron bridge. Later it was taken down and each piece was marked so that the bridge could be reconstructed at Poplar Street. Again in 1889, the Franklin Street bridge was destroyed and again in 1936. The last time the water was forceful enough to lift it from its abutments and carry it 800 yards down stream.

Until 1887, it was the custom to post a sign on all bridges to the effect that a fine would be imposed on anyone driving a horse faster than a walk over the bridge. However, when the steel bridge was erected, it was considered strong enough to allow a horse to pass over it "at the will of the driver." In those days horses with sleighs raced out Franklin Street in the winter time.

Roads

There were three roads of importance to the early settlers. At the December term of court in 1800, a petition was presented to the court of quarter sessions for Somerset County as follows:

"That a road hath lately been laid out from the Town of Somerset to the Town of Beula passing by or near a place known by the name of Samuel Steel's saw mill. Also, that one other road from Somerset to Beula hath been laid out . . . In the laying out the two roads aforesaid, the said petitioners agree there is great propriety as they swerve from each other so as that one materially accommodates the neighborhood of Stoystown and the other Ben's Creek settlement."

The Benscreek road is substantially now the Somerset Pike. The Hudson and Morrison map of 1816 does not show that the Beula road was ever opened between Johnstown and Beula. The Galbreath or Frankstown Road ran along a ridge almost to Munster. Then it took a southward course and passed Ebensburg about four miles south, thence to and across the Laurel Hill. The popular Frankstown Avenue in the city of Pittsburgh is the westerly terminus of this road. There is confusion in the name Frankstown Road for there were two roads

Roads

by this name. The second one, authorized in 1792, led from Frankstown to Conemaugh and thence to the northwest side of the Chestnut Ridge at or near Thomas Trimble's. This is still the direct route from Hollidaysburg to Johnstown. The Bedford to Johnstown road is the oldest one in the County and ended at the corner of Main and Bedford Streets. It was opened for travel so early that there is no record of its beginning. It was the most direct route between these points and may have been traveled as early as 1731, when it was simply a trail to the nearest block house at Bedford. This is the road that was used by Solomon and Samuel Adams and their sister Rachel between 1760 and 1770. On this road at the place now called Scalp Level, Samuel Adams and an Indian killed each other in 1771 when the family was fleeing to the block house. Lumbermen, however, have a different interpretation for the place-name *Scalp Level*. To them, it meant cutting the timber close to the ground.

Civic Development

The charter original for Johnstown was not issued by virtue of government authority, but was given by a solemn pledge in writing by Joseph Johns. Conemaugh—Old Town, established in 1800, became Conemaugh Borough in 1831. The borough of Conemaugh became the borough of Johnstown in 1834, and the borough of Johnstown became the city of Johnstown in the fall of 1889, just after the great flood.

As the community grew and prospered, Johnstown's civic development paralleled its industrial development. The hog, the cow, and the goose ordinances gave evidence of growing civic consciousness and developing community maturity on the part of the citizenry. These ordinances prohibited the animals from running at large in the Town. The succession of fences which surrounded Central Park were for the purpose of keeping the cows out.

CAMBRIA PUBLIC LIBRARY—The first library in Johnstown was organized as a subscription library, occupying a space in the Assistant Fire Company hall. A charter was procured in June, 1870. The first library building was built by the Cambria Iron Company in 1880, and was destroyed in the flood of 1889.

Civic Development

The present edifice stands on the site of the original structure on the corner of Washington and Walnut Streets. This building was given by Andrew Carnegie; however, it was not endowed by him.

The library has been maintained in turn by the Cambria Iron Company and its successors. The contributions of Bethlehem Steel Co. reached \$18,000 a year. In 1930 the contributions were discontinued. Beginning in 1930 many boroughs made annual appropriations which enabled the library to remain open. The City Council appropriated money in 1932, and the Johnstown School Board began its appropriation in 1942 and continued until 1946.

The Women's Library Association was organized in 1932 to assist in the maintenance of the institution during the depression years. The first floor was destroyed in the flood of 1936, and the Women's Library Association with the aid of State funds for flooded libraries remodeled the first floor into a room for boys and girls. In this room was placed a plaque dedicating it to the President, Miss Florence L. Gocher, who was active in the organization of the Association. Mrs. W. O. Keffer was Secretary and Mrs. Joseph J. Meyer was Treasurer.

The Community Chest aided the library as one of its agencies in November, 1940, and continued its contributions until January, 1942. In the 1946 November election an annual tax of ½ mill on all taxable property in the city of Johnstown to maintain the library was passed. The Westmont Borough continued to contribute on the same basis as the Johnstown taxpayers.

In February, 1945 the library observed its 75th anni-

From Trail Dust to Star Dust

versary. The following statement is taken from *The Johnstown Democrat* of January 31, 1945: "*Out of the debris of disaster and devastation has emerged the best institution the community has ever known. In true embodiment of the aims for all public institutions of Johnstown, the library is better equipped to serve and progress than ever before.*"

The Cambria Public Library is indeed fortunate to possess one of the first editions of the *Messiah*. It was presented to the library by Mr. and Mrs. Donald Davis in the early 1940's. It was brought to this Country by Mr. John Davis, a native of Wales, in 1840. According to Mr. William C. Smith in his book *Concerning Handel: His Life and Works* (London, Cassell, 1948) every authenticating detail is present in this edition. According to Mr. Smith, with whom the library has corresponded, it is the only known copy in America and one of the two in the world, he having the other.

The title page of this valuable edition reads as follows:

Messiah
an
Oratorio
in Score
As it was Originally performed
Composed by
Mr. Handel
To which are added
His additional Alterations
London. Printed by Messrs. Randall & Abbell Successors to
the late Mr. J. Walsh in Catherine Street in the Strand
of whom may be had
the compleat Scores of Samson, Alexander's Feast, and Acis &
Galatea.

This image shows a blank, aged, cream-colored page, likely an endpaper or flyleaf of a book. The paper has a slightly textured appearance with some faint smudges and discoloration, characteristic of old paper. There is no text or other markings on the page.

01701710

1111 D 11

[Faint, illegible handwritten notes or bleed-through from the reverse side of the page.]

A vertical strip of a woven textile, likely a rug or tapestry, featuring a repeating geometric pattern of small squares and diamonds in a light beige color against a darker background. The pattern is dense and intricate, with some areas showing more complex interlocking designs. The texture appears to be that of a heavy weave, possibly silk or wool. The strip is oriented vertically, showing a portion of the overall design.

This is a detailed map of the coastal region of the Republic of China (Taiwan) and surrounding areas. The map shows the coastline of Taiwan, with major cities like Taipei, Keelung, and Keelung. It also includes the Philippines, with major cities like Manila, Cebu, and Iloilo. The map shows the South China Sea, the Philippine Sea, and the Japanese archipelago. The map is oriented with North at the top.

Countess

THE MESSIAH IN AMERICA

Courtesy Cambria Public Library

ONLY KNOWN FIRST EDITION OF THE MESSIAH IN AMERICA

From Trail Dust to Star Dust

Edgehill Drive in Westmont, the double-track plane has an oblique length of 896½ feet, a perpendicular lift of over 500 feet, and a 35-degree 25-minute inclination. The two-inch diameter steel cables which alternately raise and lower the cars, accommodating both vehicular and passenger traffic, were made, time-tested, and proved (to 168 tons capacity) in the laboratories of the Cambria plant. They are replaced at regular intervals, and their ruggedness is evidenced by a virtually uninterrupted and accident-free service on the Plane over a period of almost seventy years. Having a 71 per cent grade, it is considered the steepest plane of its kind in the Country. It is powered by a 300 H.P. electric motor having a 16-foot diameter drum. The Borough of Westmont purchased and began operating the Plane in 1935. The top level of the Plane, almost 1,700 feet above sea level, commands a breath-taking view of the City, the surrounding hills and the Gap—Johnstown, a city resulting from its environment.

A CITIZEN'S CREED

I believe:

- 1. In the city, maker of state and nation and the power of the individual to direct and shape its life.*
- 2. In my community and its ability to accomplish greater things and in my neighbor and me to make it a more wholesome and beautiful place to live in and to attract others.*
- 3. In my street and my ward as much as I do in my house and lot, and they are what I make them.*
- 4. In the wholly American community, the cooperation of citizens and the principles of freedom and democracy everlasting.*

W. C. HOWLAND,
Leader Press, Johnstown, 1917.

Newspapers

The first newspaper in the County was the *Western Sky* published in Beula, a settlement of the Welsh, three miles west of Ebensburg. This was the town which in 1804 had early hopes of being the county seat. There were a number of early newspapers published in Ebensburg, but like Beula their lives were short. Most of them were for political advertisement and their rise and fall were completely dependent upon the success or failure of the political candidates who sponsored them.

James Moore Swank founded the *Cambria Tribune* in 1853, a weekly newspaper with six columns in folio size, 22 by 32 inches. It contained literary writings both original and reprint, something of national politics and events, advertisements, and a little local news. The *Johnstown Democrat*, the second paper of the name to be published, made its first appearance on March 5, 1863.

Through the influence of D. J. Morrell and other Republicans, the *Cambria Tribune* expanded rapidly. One of the early July 3rd issues was novel and notable; it was printed on the outside in blue and on the inside in red! In 1865 the name of the paper was changed to *The Johns-*

From Trail Dust to Star Dust

town Tribune. James Swank sold out to his brother, George T., better known as "Tom," who had worked in New York under Horace Greely. Mr. "Tom" Swank modeled his paper after the style of the *New York Tribune*. This influence can still be seen in the physical make-up of the 8-column daily, *The Tribune-Democrat*. This is a paper continuing the old *Johnstown Tribune* and the *Johnstown Democrat*, the consolidation taking place in September, 1952. It is the only paper in the County having a complete morgue. Between May 31, 1889 and June 13, 1889, however, no paper was published.

Early Churches

Father Gallitzin, a pioneer pastor to the people in the forest on top of the Alleghenies, came from a Russian noble family who had been prominent in war and diplomacy. His father, having a profound admiration for John Adams, sent his son to the United States for travel under the hoped-for influence of Mr. Adams. This hope never materialized. Laying aside his princely title, Demetrius Augustine Gallitzin traveled under the name of Mr. Schmet, an abbreviation for "von Schmettau," his mother's family name. He arrived in Baltimore in the fall of 1792. Here Bishop Carroll took an interest in him which resulted in the prince's decision to renounce a military career and to enter the church for the good of the American mission. He was known as "Father Smith" when he arrived at Loretto to found the church community requested by Captain McGuire. On a tract of land granted by the captain to Bishop Carroll for the church and its schools, Father Gallitzin began to construct the log church which was dedicated on Christmas Eve, 1799. Here he celebrated the first mass held anywhere between the Mississippi and the Susquehanna rivers. By his versatility as priest, counsellor, teacher, doctor, trader, tan-

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ner, and farmer, he established a community which still bears testimony to his influence.

Until 1828, the different Christian sects in the Cone-maugh Valley worshipped together in the school house on the plot provided by Joseph Johns for that purpose. In 1835, the Presbyterians built a frame church on Main Street. The Methodists were deeded a lot on the corner of Franklin and Vine streets (the site of the present United Brethren Church) by Peter Levergood for the sum of six cents. The site of their present church property was secured from Adam Cover for little more. Lutherans and Catholics erected churches and convents, and provided the first teachers. The first parochial school was established by the Lutherans not far from the site of Joseph Johns' cabin. At present there are approximately 120 churches for the 22 different denominations in Johnstown.

Schools

Prior to the Act of 1834, providing for free public schools, education in the County was gained only in private schools which belonged to the masters who taught them, or in church schools, or under private tutor. The first school in the County was that opened by Father Gallitzin in connection with his church at Loretto in 1800. The second was at Beula. The third school was in Johnstown in 1805. It was a little log house, 18 by 20 feet, on the lot at the northeastern corner of Vine Street and Park Place. Reverend Mineely was the first teacher. Tuition per month was 50 to 75 cents for six days a week.

The first effort toward free common schools was the Act of 1809. Its basic principle was so objectionable that it was known as the "Pauper Schools Act." Poor children could be sent to any school and the County would pay the tuition if the parents could not. This was naturally not a success in a democracy. In 1834, came the first substantial act with a State appropriation of \$75,000. Thaddeus Stevens defeated an attempt to repeal this act. Joseph Johns must have had some of the spirit of Thaddeus Stevens when in 1800, thirty-

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four years earlier, he dedicated the large piece of ground "for erecting school houses and houses of public worship, free and clear of all encumbrances." Joseph Johns Junior High School now stands on this ground. In 1810, on the northeast corner of the grant, a one-story log schoolhouse was erected which was subsequently weather boarded but never painted. The boys called it "Old Blacky." It was paid for by public subscription and was also used as the first place of worship. Until 1854, "Old Blacky" was used for school purposes.

In 1836, two years after the Act of 1834, the "Little Brick" was built on the southwest corner of the grant and was also used as a place of worship. A year later a school was built on the southwest corner of Walnut and Conemaugh streets for \$200. In 1850, this school was moved to Market Street between "Old Blacky" and the "Little Brick." It was named the "White Schoolhouse." The new structure cost \$4,458.

It was not until 1855 that the schools were graded. The first high school was organized in 1868 in the building used at one time by the Baltimore and Ohio Railroad for a station. It was near the site of the old Canal basin. As the public schools were growing and being graded, the parochial and private schools, the latter sometimes called select schools, were developing. A select school for young ladies stood where the Episcopal Church now stands. When the Free Public School Law became effective, Adam Coover, the first tax collector, collected in 1834 the sum of \$388 in local taxes; the State contributed \$73 locally. Adam Coover, together with Peter Levergood, George W. Easley,

Schools

George Beam, and E. A. Vickroy, served as Board of Directors for Public Schools. Robert P. Linton was a teacher, and an ardent advocate of free public schools. Benjamin Benshoof was Assessor at the time, and heartily cooperated with Adam Coover, Collector, and his fellow advocates of public free education in County and Township precincts. The first high school commencement was in 1882.

As Johnstown progressed, the organization of the first school district (underway in 1844) was the signal for the start of a rapid growth that was to continue unabated for the next century. Parochial schools were established by Mennonites and Catholics. Most Catholic parishes have elementary schools, and in the Eighth Ward there is a Catholic High School to educate students from all over the City.

In 1927 the University of Pittsburgh established a Center in Johnstown, renting space in the high school building. The Johnstown Center later became the Johnstown College of the University of Pittsburgh, with quarters located in Moxham. It has been a great boon to the young people of the greater Johnstown area and has encouraged many students to secure a college education.

Music

Music played an important part in the lives of the early settlers. Most of them being German and Welsh, they had an innate love for music. The first organ (a small hand organ) in Cambria County was owned by Jacob Coover, who taught music in Benscreek, in Stutzman School (now a Westmont grade school) and in Ligonier. Mr. Coover, who lived at Millcreek and worked at the furnace there, would place the organ on a sled in winter and on a wagon in summer and take it to the people who gathered to sing. Before the days of the organ, the teacher using a pitch pipe would lead the singing by "lining" the music.

Later, the Welsh and Germans had their own singing groups which competed successfully with other state and national organizations. The names of Mr. Thomas Morgan and Mr. Charles Martin are associated with these later groups.

Please refer to page 80 for information regarding the Cambria Public Library's possession of a first edition of Handel's *Messiah*.

The Public Square

Before 1873, there were four permanent buildings on the public square or Central Park as it is known today: a stone "lock-up" on the corner near Franklin Street and Locust Street; a fire-house facing on Franklin Street; and two market houses. All were later removed and the square was used as a playground, especially for baseball and for public demonstrations until it was converted into a park in 1880. A temporary structure fronting on Main Street was known as the picture gallery because the word *daguerreotype* was too difficult to say. The Whigs and Republicans had a platform near the market house facing on Locust Street; the Democrats had theirs near the "lock-up" facing on Main Street. During the Civil War, a platform was erected near the present site of the G.A.R. Hall. Union speeches were made here, and the "Boys in Blue" were entertained and received. When election returns were announced, bonfires were built in the park. And here in the park, the quacks, soap dealers, and fakirs plied their nefarious trades.

One of the most popular and enthusiastic demonstrations in the Square was the celebration of the laying

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of the Atlantic Cable in August 1858. The files of *The Tribune* for August 21, 1858 describe it graphically. *"There was a great bonfire. The fence was studded with candles. At that time there was a post-and-top-rail fence to prevent unlawful trespassing. On the top rail, three nails were driven in a group, the groups being placed 12 inches apart. In the holders, candles were placed and lighted when twilight had passed and the bonfire had started to blaze. Crowds flocked to the scene. All the bells in the Town pealed. The fire apparatus, illumined with candles, was drawn through town in the midst of a shouting populace and stirring music."*

The Square was a favorite place for baseball clubs to practice, but it was not large enough for games. In 1874, however, a fountain was placed in the center of the park. It was a large round basin surrounded by six galvanized iron swans. Sixty-four trees were planted, all of which were destroyed by the great flood of 1889, when fires again illumined the square—not for celebration but for destruction of inflammable rubbish piled fifteen feet high in the park.

Following the flood, there were again buildings on the park, temporary ones this time. The Flood Relief Commission constructed a two-story frame building around the four sides of the Square facing the streets. Merchants used the lower floor to start business again; doctors and lawyers occupied the upper floor. The firm of Hoover and Hughes from Bellefonte was hired by General Hastings to build these temporary store rooms and offices on the four sides of the Square. In addition, the firm built new homes. Some of these, known as

The Public Square

Hughes houses, are still in use. Joseph Masters, chairman of the committee, received applications for space. On July 4, under the supervision of Colonel John P. Linton, a boy drew names of applicants from a box. One year later, 1890, the Square was once more a park. The first "building" for business in the center of the town after the flood was a converted piano box at the corner of Clinton Street and Main. The son of the proprietor was constantly teased by his comrades with the question, "Abie, does your father need an elevator boy?"

The circuses used the park until they became too large for the space. They were then moved to Dibert Field and later to *The Point*. The first circus came in 1833. The Public Square was truly the heart of the City, the seat of life and recreation, and now rich in reminiscences.

Disasters

PLATFORM COLLAPSE — The first great disaster in Johnstown was the fall of the Pennsylvania Railroad platform on September 14, 1866. Three people were killed, three died later, and 387 were injured. Practically every family in the Town had at least one member included in the list of injured. The accident happened when President Andrew Johnson and his companions were on their “swing around the circle.” Those accompanying President Johnson included General Grant, Admiral Farragut, and Secretary of State William Seward. The purpose of the trip was an attempt to change the membership of Congress. Immense crowds had gathered at eleven o’clock when the special train arrived. Two thousand persons, crowded upon the platform, eager to see the President and his distinguished guests, were suddenly dropped into a pit as the twenty-foot-high platform swayed and sank when the crowd surged forward in their eagerness.

Among those who escaped was Dr. Henry Hinchman, Sr. Held in his mother’s arms, he with his mother escaped injury and perhaps death when her hoop skirt caught on a nail and they hung suspended until rescued.

Disasters

When the President reached Altoona, he sent a letter and \$500 to Mr. Morrell.

MINE EXPLOSION — Next to the great flood disaster of 1889, when thousands of lives were lost, was the mine explosion, which occurred on July 10, 1902. The loss in human lives was 114. In the Rolling Mill coal mine of the Cambria Steel Co., always considered safe, poisonous gas had collected. At the time of the explosion, there were 650 men working for the company, 450 of whom were in the mine. The output of the mine was 2,600 tons a day. Forced back by the deadly gas, several of the rescuers succumbed, too. The nationality of the victims as they have been recorded gives a good idea of the cosmopolitan make-up of Johnstown's people at the turn of the century, one hundred years after its founding:

Polish	58	Magyar	4
Slovak	25	Welsh	2
Croatian	11	Irish	2
English	5	American	2
German	4	Slavak	1

It was a peculiar explosion, for although there was great loss of life, the damage to the mine was insignificant. Only the doors in one part of the mine were blown down; the report was not loud; and many of the miners did not hear it. In fact, if the concussion had been louder, many lives might have been saved.

FLOODS — What of the floods that perpetually seem to have threatened Johnstown? Geologists believe that the broadness of the Valley and the flatness of

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the hill-tops indicate that the Johnstown site was formed by local flood plains.

The first recorded flood was in 1808. Another flood occurred in 1811 when a dam across the Stony Creek was destroyed. It had fed the millrace for Holliday's iron forge. Best known of the earlier inundations were the "pumpkin floods" in the period of 1816 to 1820. These were so called because of the large number of vegetables—pumpkins predominantly—which floated in from the farms and gardens in the sections known today as Moxham and Roxbury.

Locks in the old Pennsylvania Canal were damaged by high water in February, 1832. In 1847, when a feeder dam on the Stony Creek broke, the eastern end of the canal basin was damaged and the Town was flooded from Market Street to *The Point*.

The next inundation of Johnstown occurred in November, 1859. Damage to bridges occurred for the first time in 1861 when the Franklin Street span was washed away. That year the Kernville section was flooded back to Haynes Street and the City west of Walnut Street was under water.

High water in 1867 again destroyed the Franklin Street Bridge, even though it was two feet higher than the one carried away six years earlier.

One of the rivers overflowed its banks in 1875 but no bridges were lost.

Between 1880 and 1888 seven floods were recorded. In 1880 *The Point* area was covered. The following year Johnstown had its highest water since 1862. There was 10 inches of water reported in the basement of the Cambria Iron Co. office on Washington Street.

Disasters

The flood of 1883 broke a log boom on the Stony Creek at Stoystown and the water crept up Main Street almost to Walnut. Water was six inches deep on Iron Street, in Millville.

In 1884 a flood broke another log boom at Hollsopple and timber was scattered along the stream banks from there to Seward. Horse-car service to Cambria City was suspended.

A cloudburst on July 7, 1887, caused the Stony Creek to rise three and one-half feet in 30 minutes. The surging stream tore planks from the Franklin Street Bridge. Central Park was covered to a depth of two feet.

In 1889, the great flood brought complete disaster and destruction. The ground at *The Point* was raised five feet because so much earth had been washed into the Valley. Those who remember the old Capital Hotel will recall that the "basement" floor was at ground level before the 1889 flood.

In 1891, the business section was flooded with great loss to the merchants. In 1907, the flood waters reached the greatest height except for those of the great flood. In 1936, the water was higher than in the 1889 flood and the property damage was much greater. In this flood the people were able to escape; there was not the accompanying sudden disaster of a broken dam. A marker on the Public Safety Building shows the height of the water in the flood of 1936.

Until 1870, the average width of the Little Cone-maugh was 195 feet and that of the Stony Creek, 288 feet. Below *The Point*, the average width was 350 feet. From the time the mills began to operate, slag was

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dumped into the river and along the banks of the rivers for a two-fold purpose: first, to get rid of the slag; second, to increase the acreage of the business section in the Valley, for its boundaries were limited by the immovable Prospect and Yoder hills. In fact, the increase in iron production and transportation made it necessary to have more ground on both sides of the rivers.

Joseph Johns' house, built of walnut logs, stood on the river bank at the upper end of Vine Street and Levergood Street. Some years ago when digging for street improvement on Vine Street, workmen found an old retaining wall standing in the middle of the present street. Now there is a street, a sidewalk, and a row of houses beyond, touching on the river bank. All this is filled-in ground.

Partially aware of the dangers of encroachment, the authorities at one time established the width of the Little Conemaugh at 110 feet, and that of the Stony Creek at 175 feet. This was a mistake. In 1890 Little Conemaugh was fixed at 125 feet; the Stony Creek at 225 feet. Encroachments had been as much as 105 feet. The natural flow of the stream reached an all-time high in March, 1936. Since there was no accompanying calamity comparable to the dam break in 1889, the loss of life was small. Property damage, however, was enormous; and the actual loss was about four times as great as in the 1889 flood.

At long last, the Johnstown Channel Improvement Project was authorized by the Federal Flood Control Board of 1936. At a cost of over \$8,000,000—borne by the Federal government—Johnstown is now "flood-free."

The Great Flood of 1889

Torrential rains had swollen the narrowed rivers to overflowing. On Memorial Day 1889 and early the following day, Friday, May 31, afterwards known as "Black Friday," the overflow from the South Fork Dam had helped to cover the portion of the Town lying below Market Street. Rising rapidly, the water soon extended as far as Jackson Street. The mills had closed early, the stores followed, and the street cars soon stopped running. At eleven o'clock, the Poplar Street bridge was carried off. Other bridges followed. At one o'clock, the people were completely housed. Water continued to rise in the streets. The Pennsylvania Railroad agent informed the Central Telephone Co. that the danger of the South Fork Dam breaking was increasing momentarily.

There were people in the Town who for years had feared the breaking of the dam, for there had been rumors of the slipshod, careless, and unsound structure of the breast, which already had broken twice under far less pressure. With this dangerous threat in their minds, many families started for the hills early Friday morning.

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Shortly after one o'clock, the pressure did become too great, and the breast, flimsily made of straw, stones, stumps, and sand, did give way, throwing its tremendous roaring, grinding, gushing body of water (three miles long, a mile wide in places, and sixty feet deep—ninety at the breast) into the already submerged Conemaugh Valley. Five hundred million cubic feet of water — enough barrels of water to girdle the earth—moved and angrily rushed down the Valley like a huge avalanche. Momentarily checked by the Conemaugh viaduct, a part of the Portage Railroad, the 18,000,000 tons of water swept like a gigantic grey cloud of dust upon the Town. But, far more solid than dust, it tumbled locomotives, factories, houses, bridges, whole trains, and thousands of human beings like toys in front of it.

At the Viaduct the water rose to 79 feet before the masonry gave way. Markings on trees and rock proved this. The water ran through the cut on the easterly side to the height of ten feet. Niagara Falls would be a tiny cascade by comparison. The whole hissing, seething, roaring avalanche hurled itself upon the Valley.

Even if the people could have been warned at once, they could not have fled from the Valley, for the water was already between two and ten feet deep everywhere. It was about ten minutes of four o'clock in the afternoon when the first wave struck the Stone Bridge, having been checked twice, first at the Viaduct and next at Bridge No. 6 of the Pennsylvania Railroad. In both cases the water ran over the tracks and through the cuts before the obstructions gave way. At ten minutes after four, the mighty moving mass of water reached

The Great Flood of 1889

the main portion of the Town. Houses, mills, stacks, engines tumbled over like straws as the current moved along at twenty to thirty miles per hour.

When it is clear that the traffic of the strongest, richest railroad corporation on earth with unlimited men and money at its disposal was effectually blocked for thirteen days, the character and magnitude of the destruction is evident. Articles and luggage of passengers on the Day Express which had been stopped at Conemaugh were picked up 50 miles down the river. Those who lived to remember the shriek of the whistle, which the engineer of that stopped train released when word of the dam-breaking reached him by telegraph, never forgot it. Among the lost were many non-Johnstownians on the stranded express; people who could not or would not make it to the hills.

The wave kept in a somewhat straight line with the Little Conemaugh until it reached Westmont Hill at the Stone Bridge, when, instead of following the channel, it turned up the Stony Creek. This caused the great weight behind it to open up new channels. At quarter after four, planing mills, the skating rink, "floating like Noah's Ark," and other large buildings were crushing the smaller buildings. Brick houses crumbled and wooden ones, wrenched from their foundations, floated. Roofs, ripped off, became rafts to whose ridges desperate people clung with numbing fingers. Within three minutes, the arches of the Stone Bridge were solidly filled with wreckage which soon extended up the Stony Creek to Main Street. Bodies of human beings and animals were part of that wreckage. Only one person is known to have

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passed *through* the arches of the Stone bridge and lived. Many victims who survived were carried afloat as far out as the Eighth Ward and then swept back again.

Although many succeeded in escaping over the wreckage to the hillsides, more than 2000 lives were lost. Those rescued in the lower portion of the Town congregated in Alma Hall. Others, carried to the South Side, climbed over debris to the Dibert Street school. Others reached houses still standing. One little boy living in Woodvale, caught by the approaching avalanche and swept away on the debris, floated to the home of Reverend Fink at the corner of Somerset and Willow Streets—a distance of approximately five miles. When being carried past a window on the second floor, he succeeded in catching hold, and looking into the room, he saw Miss Columbia Horne. With a most pleading voice, he cried, “Missus, can I come in?”

The danger from the water was past at five-thirty. It had moved through the break in the embankment at the Stone Bridge, but a greater horror was approaching. Fires began from broken gas mains, upset stoves, or from oil. The fire at the Stone Bridge raged until Sunday evening when it was extinguished by the Pittsburgh Fire Department. At ten o’clock on that blazing “Black Friday” evening, the reflection from the fire was so bright that the print of a newspaper could be read in any part of the Town below Clinton Street. The suspense and suffering on that first night seemed endless to the survivors, but the horrors of the next day were worse. Such a scene of human sacrifice is difficult to imagine, for sacrifice it was to the irresponsible whims of pleasure-seekers and the

The Great Flood of 1889

negligent building of an insecure breast of the South Fork Dam. Whole families were wiped out in a matter of seconds. Lying buried in the sand and wreckage were 2,205 lifeless bodies, swept into oblivion within five minutes.

The Pennsylvania Railroad lost 24 passenger cars, 561 freight cars, and 34 locomotives, in addition to tracks, bridges and buildings. Thirty railroad passengers lost their lives by drowning.

The chances of life for anyone in the way of the flood after the dam broke were very small. In such cases—according to the law and theory of physics—the flood advanced not with a comparatively shallow advance guard, but with a solid wall front which struck with terrible velocity and directly downward rather than from the side. The water advanced “like a wall thirty or forty feet high.” The water which first flowed out was retarded by the rough surface, trees, rocks, houses, animals, and other obstacles, speedily losing its velocity but furnishing an almost frictionless surface over which other water could slide like ice down a plank. Thus the top of the flood was moving faster than the bottom and so fell over the end of itself as it reached the edge—only to be retarded and lose a part of its energy and so beat down instead of driving forward any unfortunate human or house in its path.

The bottom of the flood was relatively stationary; the top had its full physical velocity due to the fall. The average velocity of its advance, therefore, became but slightly more than half the top velocity. In fact, the water rolled over itself at the front of the flood much

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as a wheel rolls, except that the lower part of the flood wheel never rose again once it struck the ground. This explanation was made in the "horse and buggy" age. Today, the comparison might be made with an automobile wheel blowing the snow behind it as it tries for traction.

The fall from the reservoir to Johnstown was about 450 feet. The actual time taken by the flood to reach Johnstown corresponds very closely with that of the theory just explained. Allowing for frictional losses, a man who met the direct impact of the torrent had the same chance of resisting it and escaping as he would in meeting the impact of Niagara Falls.

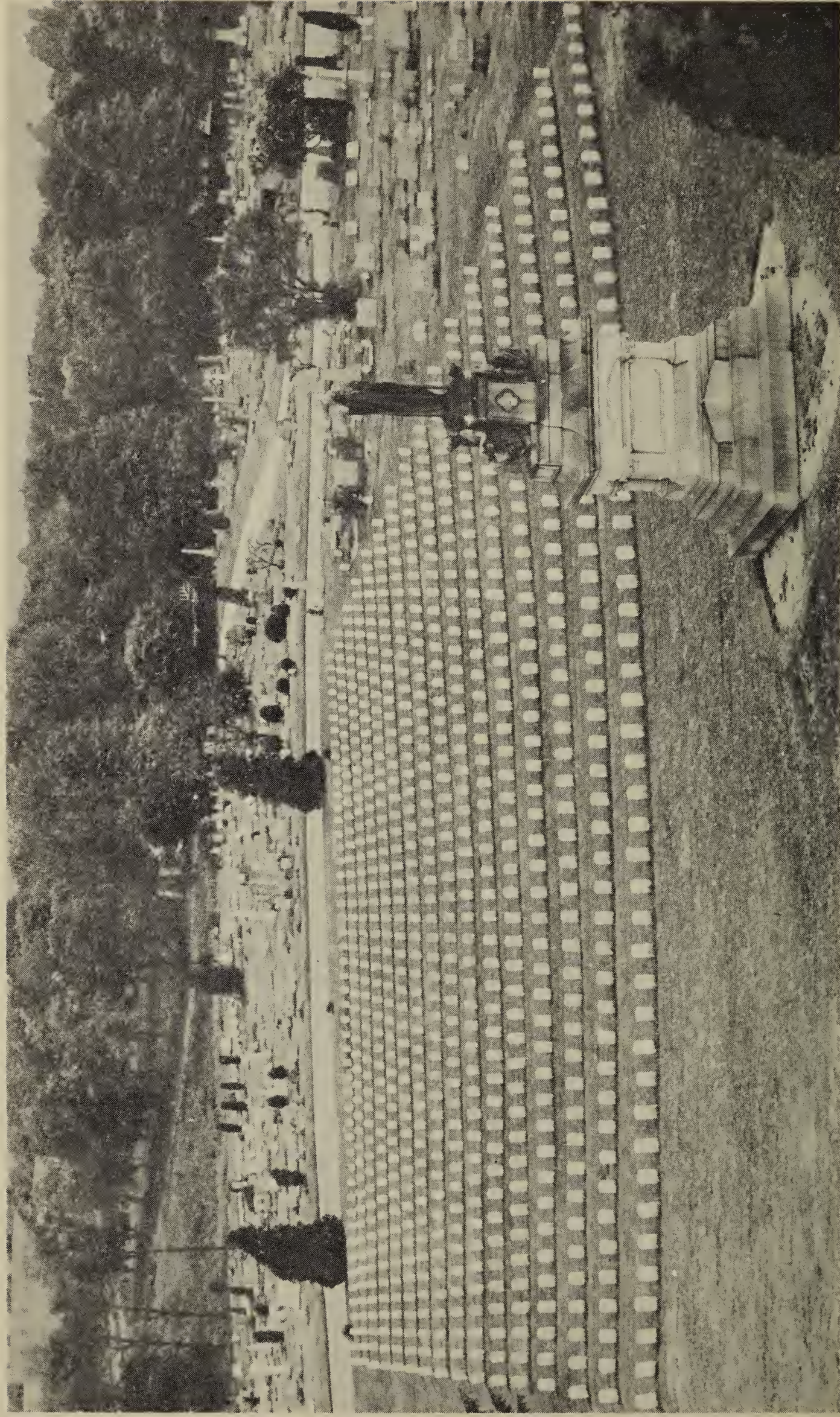
Within a space one-eighth mile wide and about one mile long, over two thousand people drowned. Every newspaper writer in the Country exhausted his vocabulary in an attempt to portray the scene in the fullness of its dreadful devastating details.

The main body of the flood rushed downward to the west through the heart of Johnstown, sweeping it clean and impinging directly against the mountain side. The Stone Bridge, whose resistance to the torrent piled up bodies and debris against it, was a structure of fifty feet wide, thirty-two feet high, with seven *skew* spans of fifty-eight feet each, carrying four tracks. The fact that the bridge stood the impact is due solely to the accident of its position and not to its strength alone. Had the torrent struck it *squarely*, it would probably have been swept away as if of cardboard. Fortunately or unfortunately its axis was exactly parallel with the path of the flood which afterwards struck the face of the mountain



The Bettmann Archive

THE JOHNSTOWN FLOOD DISASTER OF 1889



Courtesy Tribune-Democrat

UNKNOWN PLOT — GRANDVIEW CEMETERY — 777 UNIDENTIFIED VICTIMS OF 1889 FLOOD

The Great Flood of 1889

full force and compressed the whole of its spoils, gathered in a fourteen-mile course, into one inextricable mass with the force of tens of thousands of tons moving at nearly sixty miles per hour.

Humorous and tragic events relieved and increased the tension of the first few days that followed. So-called miracles and despicable frauds captured the imagination and the gullibility of the people.

The work of those who helped Johnstown rise from its ruins began. Help came from the whole world. The money spent by state committees after the flood amounted to \$2,394,415.17. Imagine what this amount would be comparable to today. Of the 2,205 lives lost, 777 of them were never identified. These lie buried in one plot in the Grandview Cemetery.

On Saturday afternoon, the day following the flood, citizens began to organize relief committees. Mr. A. J. Moxham of the Lorain Steel Works was in general charge. Outside aid began arriving. On Saturday, a rope bridge was constructed from the Stone Bridge to a point near the Cambria Steel Works. Near the Cambria office, a wire, stretched across the Little Conemaugh, together with a small skiff, made a ferry. Until Sunday evening, all supplies, coffins, workmen, and helpers coming from Pittsburgh crossed the river here. By Wednesday, the Secretary of War had two pontoon bridges across the Stony Creek, one near Poplar Street and the other at the Beula Fording near Franklin Street. These were used until trestle bridges were completed on June 27.

Communication with the outside world was established Saturday also. Newsmen representing the leading

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newspapers in the East arrived, many of whom stayed until October. The Pittsburgh office of the Western Union got a wire through to the Stone Bridge on Sunday. First aid came through the diligent efforts of Robert Pitcairn, general agent for the Pennsylvania Railroad in Pittsburgh. Having been along the line on the day of the disaster and not being able to get nearer than Sang Hollow on Saturday morning, he returned to Pittsburgh, informed the Board of Commerce and arranged for relief. In the communication systems of that era, there was no conception of what we mean now when we speak of "today's news today." With the destruction of the telegraph wires, news of the appalling disaster had not yet reached the general public.

Mr. Pitcairn, with the assistance of Mr. J. B. Scott and his committee, had baskets marked "For the Johnstown Sufferers" placed on the highways and streets of Pittsburgh. Dollars heaped up in them. The newspapers printed hourly editions containing the latest news available. The Pennsylvania Railroad ran trains down Liberty Avenue where merchants and salesmen, owners and workmen alike, filled the cars with provisions and clothing. The cars not being able to come farther than the Stone Bridge had their cargoes unloaded at Morrellville and hauled by wagon over Yoder Hill (now Westmont) to South Street. On the side of the hill, near the intersection of Millcreek Road and Menoher Boulevard, the natural gas company had a reducing station. Officers of the company coming from Pittsburgh walked over the hill that first day after the flood with a huge basket of sandwiches for their workmen there.

The Great Flood of 1889

On Sunday night, June 2, Miss Clara Barton, President of the Red Cross Society, left Washington and arrived Wednesday morning on the first through Baltimore and Ohio train. Her headquarters were near the Poplar Street bridge, for here there had been less damage by the water. Later she moved them to Walnut Street, where she stayed until October. During these five months, she provided food, clothing, household utensils, and homes for those who were worthy of the help.

Her assistants went from remaining house to remaining house, from tent to tent, or to whatever shelter a family might have found, giving assistance and furnishing the needs of the family, both domestic and medical. She erected several hospitals: one for contagious diseases in Hamilton's orchard (on the southeast side of Westmont Hill); one of a general character, which was known as the Seventh Ward Hospital. The latter, a well-equipped hospital for its time, Miss Barton subsequently transferred to some residents there who should continue her work; she herself was to bear the expenses until the citizens were able to take over. This was the foundation of the Conemaugh Valley Memorial Hospital. With the help of funds left in the hands of the State Flood Commission and under their supervision, \$65,000 was used to construct the buildings. These were completed in January, 1892.

The problem of sifting the real sufferers from the impostors, who poured into the Town to prey upon both the victims and those who came to bring aid, continued to be difficult for the whole period of readjustment and reconstruction. There is no estimate of the many valu-

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ables stolen not only by the impostors but also by irresponsible citizens, or of the relief gained through false pretense. Incidents miraculous, humorous, tragic, despicable, fraudulent, and treacherous could supply radio and television today with much authentic, dramatic material.

On the second day after the flood, Governor Beaver, in conference with General Hastings and other prominent citizens of the State, together with a committee of townsmen, decided that the business of cleaning up the town and preventing an epidemic called for more than a local plan. After careful consideration of the laws of the Commonwealth concerning sanitary provisions, the State was given control. Having no appropriation to meet such a crisis, the State accepted the offer of a half-million dollars from W. H. Kemble of Philadelphia. The assembly for 1891 refunded the money to him.

General Hastings, at this time representing Governor Beaver in the rescue work, paid only \$1.50 a day to the workmen, who under the private plan had received \$2 a day. This caused discontent and most of the men left town. General Hastings, however, gathered 2000 men who had been removing debris from the Stone Bridge. By the seventeenth of June, he had 2700 men, most of them reliable, and 200 teams at work. With the coming of the General, the Town was really now under martial law, and the people and their belongings had better protection from impostors, thieves, and roustabouts.

Money, pouring in from all parts of the world, was held in Pittsburgh, Philadelphia, and New York. So great were the contributions that a special committee

The Great Flood of 1889

had to be created to care for the money and distribute it. Making their investigations almost a month after the flood, the committee established the first systematic effort to determine the number of lives lost and to award just payment for each property claim.

The Flood Relief Commission, as the committee was called, distributed money to all survivors according to their sworn losses. The first money distributed was \$10 to the head of the family for each surviving member of the family. Dividing the devastated areas into districts, the board fixed a day upon which they would visit each district and, with three citizens of the district, they would allow each resident to present his case. Upon these hearings and claims, payments were made. Later the Commission published their payments. Copies of the report still exist.

CLASSES FOR DISTRIBUTION OF MONEY

FIRST Those made widows and having children.

SECOND Those made widows and having no children.

THIRD Aged, decrepit, injured.

FOURTH ... Those who lost all property but not of class one or two.

FIFTH Those who sustained considerable loss.

SIXTH Young persons and those able to take care of themselves. (These got only the *per capita* share).

Housing was a perplexing problem. Those who could temporarily leave the Town were urged to do so. All the beautiful, spacious summer "cottages" of the South Fork Hunting and Fishing Club were offered to

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the flood sufferers. The owners never again returned to their "cottages." Most of these have disappeared. A few, however, can be seen in the outskirts of St. Michael. They, with the ruined breast of the dam identified by an historical marker, stand as mute evidence of one of the greatest disasters of all ages. A subcommittee of the finance committee arranged for the location and construction of portable houses known as "Oklahomas." These were small one-story dwellings in two sizes, fully equipped. The larger one, 16 feet by 24 feet, cost \$180, the smaller one \$75. The cost of the house was deducted from the amount of relief granted to a citizen.

The "Oklahomas" being so small, proved unsatisfactory, and Hoover, Hughes and Co. of Bellefonte offered to erect two-story, four-room houses for \$260. By September, 400 of these were under construction or on order. This same firm erected the row of temporary stores and offices on the four sides of the Public Square. On the ground where the Episcopal Church now stands, Clara Barton had constructed a Red Cross apartment house which was completed near the end of July. It was two stories high and contained 35 bedrooms, a dining hall, laundry, and two baths.

The State, having taken over the task of clearing the flooded area, put into action at once the laws relating to public health. It so happened that the State Board of Health was in annual convention at Pittsburgh on the day of the flood; and, consequently, Dr. Benjamin Lee, secretary of the board, came to Johnstown at once. His first official act was an order to the sheriffs of

The Great Flood of 1889

Indiana, Westmoreland, Allegheny, and Armstrong counties to summon a posse to patrol the Conemaugh River for removing debris and bodies so that these counties might be kept free from pestilence.

On his arrival, Dr. Lee established hospitals and ordered disinfectants. From Washington, the Surgeon General of the United States sent all disinfectants available. The most liberal donation of disinfectant, however, came from Quibell Brothers of Newark, England. A free contribution of \$25,000 worth of their disinfectant was admitted free of duty. No one firm in the United States had made so liberal a contribution either in money or in material. With this contribution, a street sprinkler was put into use.

It was at this time that Dr. Lee made the first request to help make Johnstown flood-free. In his letter to Benjamin Harrison, President of the United States, he requested:

“ . . . A problem now confronts me of grave importance, which, owing to the provisions of the State constitution, I am powerless to meet. The Conemaugh and Stonycreek rivers have been so filled with sand and debris, and at the same time, their banks have been destroyed to such an extent, that the whole plateau on which Woodvale and Johnstown stood, is in danger of inundation from a very moderate rainfall. The temporary structures which the homeless survivors are erecting, may at any moment be washed away. Congress will be applied to, and I presume successfully, to

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dredge and dyke the streams. But, in the meantime, immediate protection is needed. It occurred to me that you might perhaps see your way clear to assign me a portion of the contingent fund placed at your disposal . . ."

No funds were available, and Dr. Lee's request was not granted.

State funds being limited, they gave out, and State forces were withdrawn on Saturday, September 28. The citizens were not satisfied that all bodies had been recovered and so they requested help to continue the work. Again 400 men searched the streams. Four bodies were found on October 8. The following Saturday, State forces withdrew although many places had not been examined. The citizens, taking the task upon themselves, collected \$12,233. The search continued. Between Johnstown and Nineveh, 26 bodies were recovered, eleven of them being identified.

The system of supplying food, clothing, and other essentials for living was interesting, effective, and sometimes amusing. Everyone was on an equality with everyone else, for money was of no use. There was nothing to buy! Clothing of all kinds and sizes arrived. This was distributed as suitably as possible. Sometimes it meant a surreptitious and happy exchange when a six-foot man in a five-foot man's trousers met in some part of town a five-foot man in a six-foot man's trousers. One gift which arrived, no doubt well-meant, was a large box, five feet by four by two, filled with a great assortment of buttons.

The Great Flood of 1889

Everyone—men, women, children—had to line up before the commissary building. The first of these buildings was on Napoleon Street above South Street, for here there had been no serious damage from the water. Here also was the morgue until June 12, when General Hastings took charge. Other commissaries were established in Morrellville, Cambria City, Brownstown, Minersville, Rosedale, Coppersdale, Cambria, Prospect, East Conemaugh, Woodvale, and Franklin. Walnut Grove, Grubbtown (now the Eighth Ward area), and Moxham were supplied from Johnstown and Kernville.

By the end of July, the committee for the commissaries under the leadership of Colonel Spangler had reduced the number to one: — first, by consolidating Morrellville with Cambria City at the latter place; then the next four with Cambria or Prospect; and East Conemaugh and Woodvale with Franklin. From the consolidation of the commissaries came the beginning of the consolidation of the separate boroughs into the city of Johnstown on December 18, 1889. In fact, Johnstown was the first city of the third class to be established by the consolidation of boroughs. By July 22, all commissaries for food, clothing, and furniture were closed, except the one at the Pennsylvania Railroad station. On October 5, this last one also was closed. Those beneficiaries still on the list, 464 of them, made application to the Conemaugh Valley Relief Association. Upon the approval of the women of that organization, either Clara Barton, President of the Red Cross, or Captain Kuhn, who had taken charge of Colonel Spangler's work of the commissary, granted relief.

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On October 13, at the Red Cross building which had been established on Walnut Street, the Union Benevolent Association of the Conemaugh Valley was organized to continue the work of the Red Cross which was about to close its office and its work here. That same week, a reception in honor of Clara Barton was held at the Morrell Institute, the former home of D. J. Morrell. There Mrs. Moxham, President of the Women's Branch of the Benevolent Association, presented Miss Barton with a gold pin and locket set with diamonds and amethysts—a token of the people's appreciation. To show their gratitude to General Hastings, they held a reception on February 8, 1890 for the General and his wife. Three thousand grateful citizens attended. Newspaper representatives and invited guests were banqueted at the Windsor Hotel. Four years later General Hastings became Governor of Pennsylvania. To Colonel Spangler, the people presented a sword and belt when he finished his commissary work.

Like the fabled Phoenix, Johnstown rose again only to be partially destroyed a second time by the flood of 1936 with even greater property loss than in the flood of 1889 but with little loss of life, for there was not the added disaster of a broken dam. Next to the Great Flood of Biblical fame, the Johnstown Flood of 1889 is perhaps the best known. Thanks to the \$8,000,000 flood-control project, the rivers in 1940 were widened to 400 feet and "straight-jacketed" in 60-foot retaining walls. The Johnstown Channel Improvement Project was authorized by the Federal Flood Control Acts of June, 1936 and 1937. It was completed on November 27, 1943, 54 years after Dr. Lee made the first request for channel improvement.

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In the future, every citizen of Johnstown looks for greater opportunity for all citizens to live in healthful, comfortable, and attractive surroundings; to earn a living in the field of his choice which will insure happy, healthy, and secure home life; to enjoy the recreational and cultural activities made possible by the gains in production efficiency. Today about 16,000 industrial workers in the City are employed by Bethlehem Steel Co. In second place is the plant of United States Steel Corp., employing about 2,300 men. Both of these concerns are continually expanding production and at the same time reducing the working hours of labor with no monetary losses to capital or labor. Another important industry is mine and quarry products, the principal commodity in this group being soft coal, in which Cambria County ranks third in the State. This group also includes fire clay, which is necessary for constructing blast furnaces. Food and food products rank importantly; most of these are consumed locally. The National-United States Radiator Corp. (now Crane Co.) produces heating apparatus and associated products. Again, environment plays its part.

From Trail Dust to Star Dust

As Johnstown anticipates the future, it looks for greater diversity in industry, for both men and women. This is necessary to avoid unemployment when the mill production falls off. Because of this lack of diversity in employment, most families have only one "breadwinner" so, as a result, the greatest part of wages goes for necessities. Business census shows that the purchase of what are called "luxury items" is low for the population.

With the hope that the future will vindicate the wisdom of the present even as the present bears testimony to the wisdom of the past, the citizens in reflection and anticipation proudly regard their city. Johnstown's story has been the story of its environment, of the Indians and their trails, of the natural resources hidden in the hills, but most of all the story of men—George King, Daniel Johnson Morrell, John Fritz, George Fritz, and William Kelly who saved Johnstown by their tenacity, their skill, their ingenuity, their persistence, their faith, their courage, and their foresight from becoming just a country village. Two great floods could not break its spirit or stop its growth. Those who dwell upon the hills and in the valley of the Conemaugh and Stony Creek face the future with confidence and hope.

Today it is a new kind of faith and trust, a new kind of frontier spirit in the world of men to conquer the last and limitless frontier through visits to close celestial neighbors, a bold venture never even dreamed of by the pioneers in trail-blazing days. Some of these neighboring stars will be just as intriguing and just as full of mysteries

Modern Times

to present-day explorers as our country's wilderness was to the frontiersmen of years ago. Steel manufacture, the automobile, the airplane, and electrical miracles were the stepping stones resulting from scientific research.

Dr. Wernher von Braun, operations chief of the U. S. Army Ballistic Missile Agency, in a recent article published in *This Week Magazine* (copyrighted but permission respectfully granted to this publisher) stated:

"We have just opened the door into the limitless reaches of the Universe and we can see just far enough ahead to know that man is at the threshold of a momentous area. Here is opportunity, challenge, adventure so tremendous as to exceed anything which has gone before. Here is the tomorrow which youth wants to embrace, and which we must not deny because of a waning of the frontier spirit which made America great.

"Within a few decades we can have the means to send large expeditions out into the solar system, to Venus, Mars and beyond. From their explorations of our neighborly planets these expeditions will bring home a wealth of new scientific insight which will exceed some of our fondest expectations.

"It is impossible to predict the nature of all these discoveries; their cumulative effect will be

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tantamount to a scientific revolution. But it will also be a revolution of human perspective, and here may be space flight's most far-reaching payoff. We need not fear that future space explorers on their heaven-storming journeys will lose their humility. The heavens will surround them as an eternal reminder that there is a force greater than the thrust of their rocket ships, a spirit greater than the cold logic of their computers, a power greater than that of their own nation."



FROM TRAIL DUST TO STAR DUST

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